| FEDERAL ROAD REGION NO. | STATE | PROJ NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| 4 | IND. | 578(1) | 1959 | 1 | 165 |

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| SHEET NO. | STANDARD CROSS SECTIONS | |
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| SHEET NO. | STD. REINF. CONC. CULV.—SLAB TOP TYPE UNDER FILL 1'-0" TO 5'-0" (10'-0" TO 20'-0" SPAN) | |
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| SHEET NO. | STD. REINF. CONC. CULV.—SLAB TOP TYPE UNDER FILL 1'-0" TO 5'-0" (10'-0" TO 20'-0" SPAN) 15 SKEW | |
| SHEET NO. | STD. REINF. CONC. CULV.—SLAB TOP TYPE WITHOUT FILL (10'-0" TO 20'-0" SPAN) 30 SKEW | |
| SHEET NO. | STD. REINF. CONC. CULV.—SLAB TOP TYPE UNDER FILL 1'-0" TO 5'-0" (10'-0" TO 20'-0" SPAN) 30 SKEW | |
| SHEET NO. | STD. REINF. CONC. CULV.—SLAB TOP TYPE WITHOUT FILL (10'-0" TO 20'-0" SPAN) 45 SKEW | |
| SHEET NO. | STD. REINF. CONC. CULV.—SLAB TOP TYPE UNDER FILL 1'-0" TO 5'-0" (10'-0" TO 20'-0" SPAN) 45 SKEW | |
| SHEET NO. | STD. GUARD RAIL | |
| SHEET NO. 49 | STEEL BEAM GUARD RAIL 1-10-57 | |
| SHEET NO. | | |
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| SHEET NO. | | |
| SHEET NO. 50 | DATA FOR SUPERELEVATING AND WIDENING OF CURVES Adopted Sept. 1932 | |
| SHEET NO. 53-165 | STD. DETOUR SIGNS Sheet 3 (Rev 2-11-54), Sheet 2 (Rev 11-12-58) | |
| SHEET NO. | CROSS SECTIONS | |


STATE OF INDIANA

STATE HIGHWAY DEPARTMENT

# PLAN AND PROFILE OF PROPOSED

# STATE HIGHWAY

## F. PROJECT NO. 578(1)

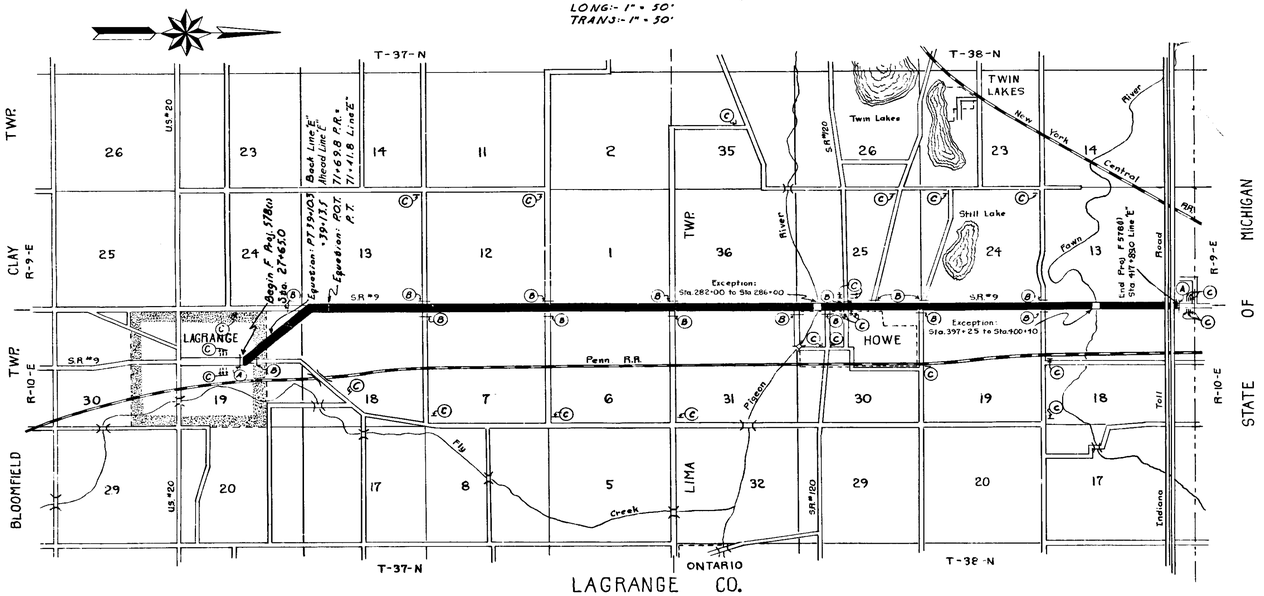
P.E.
R/W
CONSTRUCTION

BEGINNING AT A POINT ON S.R. 9 APPROXIMATELY 2663.0 FEET NORTH OF THE SOUTH SECTION LINE OF SECTION 19 T37N R10E AND EXTENDING IN A NORTHERLY DIRECTION FOR A DISTANCE OF 39,048.8 FEET TO A POINT ON S.R. 9 APPROXIMATELY 3941 FEET NORTH OF THE SECTION CORNER BETWEEN SEC. 13 & 24 T38N R9E AND SEC. 18 & 19 T38N R10E ALL IN LAGRANGE COUNTY.

GROSS LENGTH:- 7.395 MI.
NET LENGTH:- 7.260 MI.

SCALES:-
PLAN { LONG:- 1"=100' / TRANS:- 1"=100'
LONG:- 1" = 50'
TRANS:- 1" = 50'
PROFILE { HORIZ.: 1" = 50' / HORIZ.: 1"=100' / VERT.:- 1"=10'

MAX. GRADE 2.140%




Scale: 1" = 1/2 Mile

DESIGN DATA

From Central Ave. (U.S. 20) in Lagrange north to the junction with S.R. 120

| | | |
|---|---|---|
| Average Daily Traffic (1958) | | 3000 |
| Average Daily Traffic (1978) | | 5250 |
| Design Hourly Volume | | 300 |
| Directional Traffic | % | 53 |
| Trucks | % | 20 |
| Design Speed | m.p.h. | 70 |

From S.R. 120 north to the junction with the toll road

| | | |
|---|---|---|
| Average Daily Traffic (1958) | | 3900 |
| Average Daily Traffic (1978) | | 6825 |
| Design Hourly Volume | | 600 |
| Directional Traffic | % | 53 |
| Trucks | % | 20 |
| Design Speed | m.p.h. | 70 |

Not Limited Access Right-of-Way
Right-of-Way Shown on These Plans Includes R/W For Separate Contract Structures at Sta. 284+00 & Sta. 298+80

LEGEND
(A) Barricade Type "A"
(B) Barricade Type "B"
(C) Typical Sign Standard

APPROVED AND ADOPTED 6/1/59
BY STATE HIGHWAY COMMISSION OF INDIANA.
[signature]
CHAIRMAN, STATE HIGHWAY DEPARTMENT OF INDIANA
APPROVED 5-26-59
Carl E. Vogelgesang
CHIEF ENGINEER—STATE HIGHWAY DEPARTMENT OF INDIANA

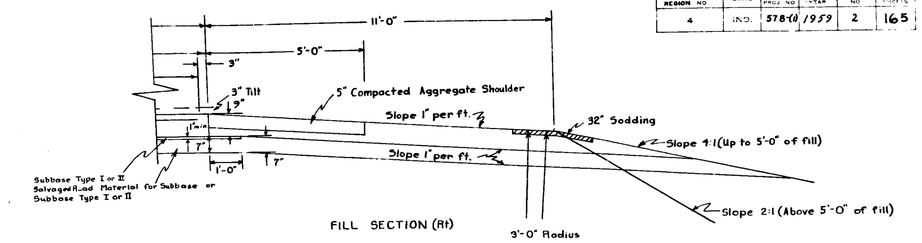
RECOMMENDED FOR APPROVAL 5-26-59
W. H. Behnen
ENGINEER OF ROAD DESIGN, STATE HIGHWAY DEPARTMENT OF INDIANA

BUREAU OF PUBLIC ROADS
DEPARTMENT OF COMMERCE
APPROVED
[redacted] [redacted]
DIVISION ENGINEER DATE

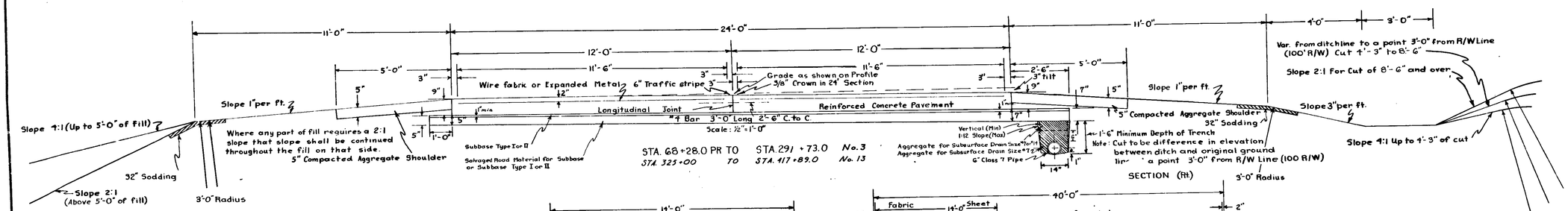
STATE HIGHWAY DEPARTMENT OF INDIANA.
STANDARD SPECIFICATIONS DATED 1957
TO BE USED WITH THESE PLANS.

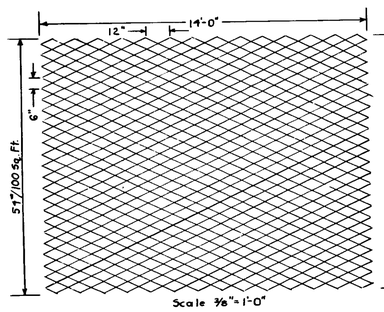
F-578(1)

| FEDERAL ROAD REGION NO. | STATE | F. PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(1) | 1959 | 2 | 165 |

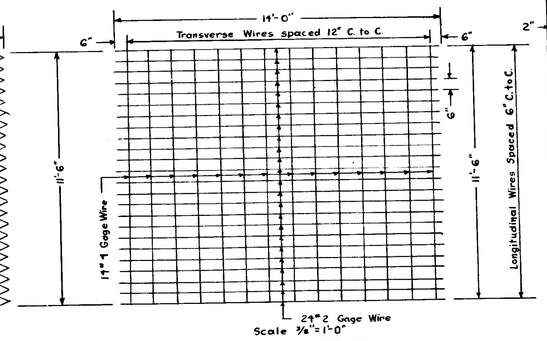



FILL SECTION (Rt)

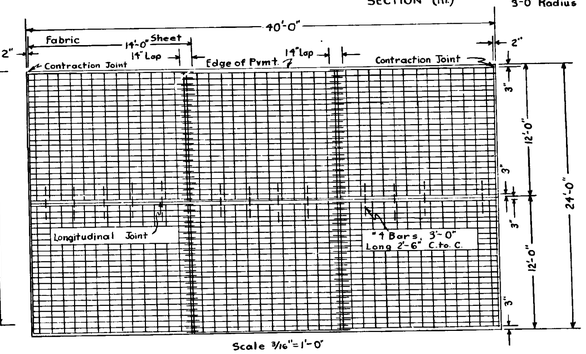



TYPICAL SHEET EXPANDED METAL FABRIC

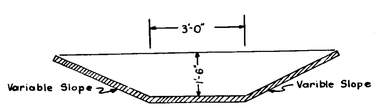



TYPICAL SHEET WIRE FABRIC

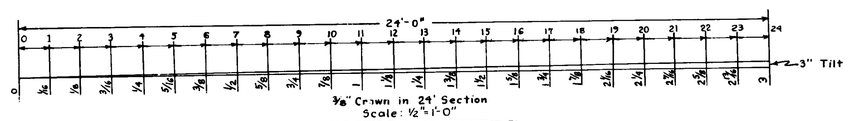



PLAN OF REINFORCED CONCRETE SLAB

## REINFORCED CONCRETE PAVEMENT




SODDED DITCH DETAIL
FOR
SPECIAL 3' BOTTOM DITCH




PAVEMENT OFFSETS

# TYPICAL CROSS SECTIONS

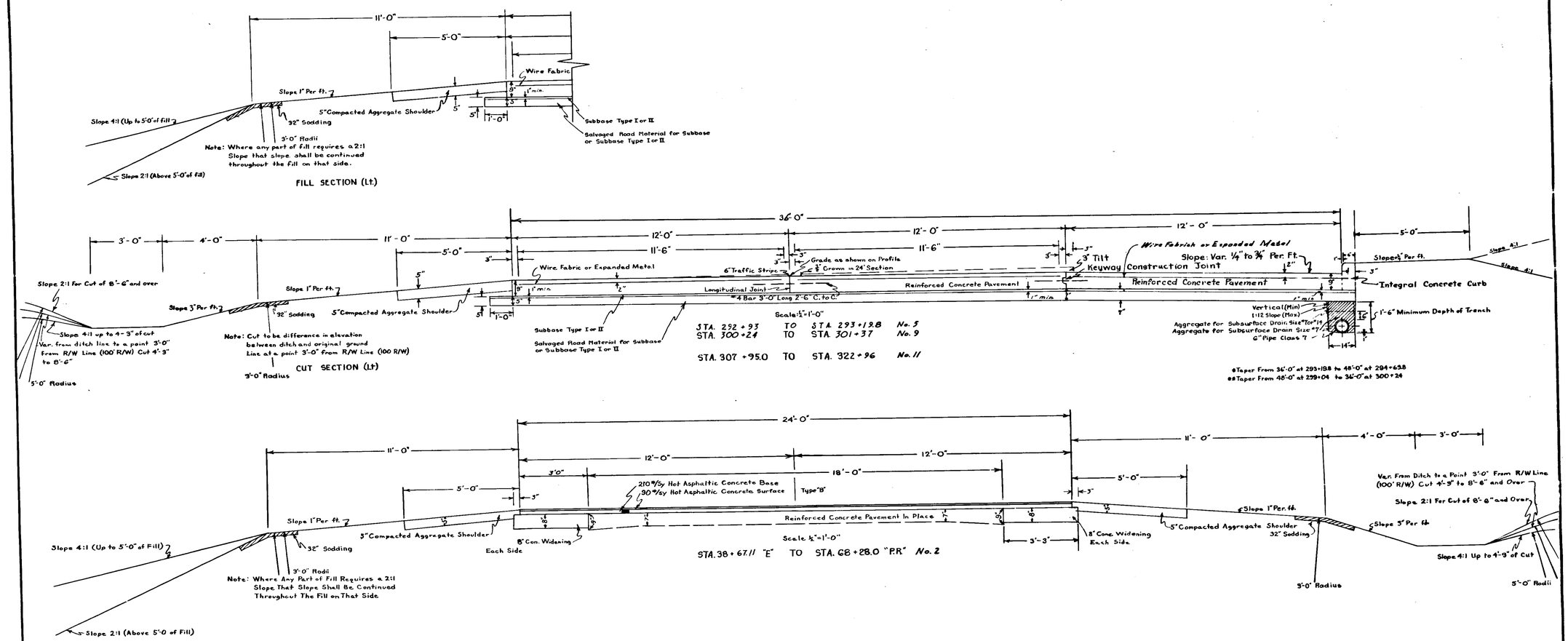
SCALE:- As Shown

APPROVED Carl E. Vogelgesang
CHIEF ENGINEER

APPROVED

RECOMMENDED FOR APPROVAL 5-26-59
W. H. Behrens
ENGINEER OF ROAD DESIGN

| FEDERAL ROAD REGION NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578-(1) | 1959 | 3 | 165 |




# TYPICAL CROSS SECTIONS

SCALE:- As shown

APPROVED Carl E. Vogelgesang
CHIEF ENGINEER STATE HIGHWAY DEPARTMENT OF INDIANA

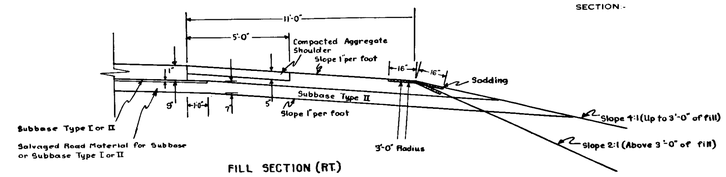
APPROVED [signature]
DEPARTMENT OF INDIANA

RECOMMENDED FOR APPROVAL 5-26-59

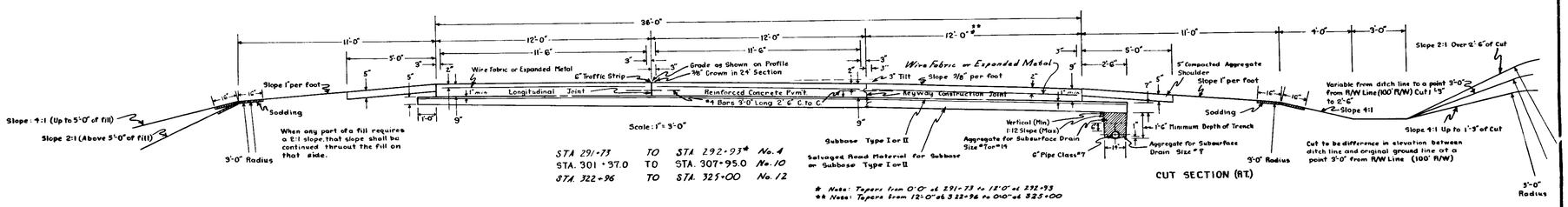
W H Behrens
ENGINEER OF ROAD DESIGN STATE HIGHWAY DEPARTMENT OF INDIANA

| FEDERAL ROAD REGION | STATE | F PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 7 | IND. | 5780(1) | 1959 | 4 | 165 |

SECTION -



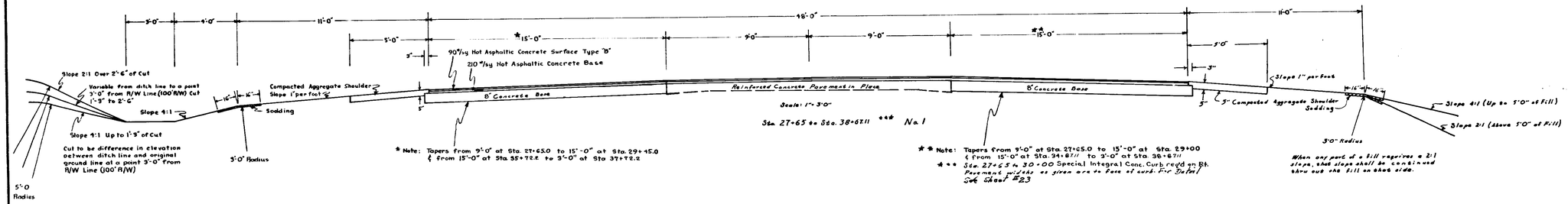

FILL SECTION (RT.)




| | | | |
|---|---|---|---|
| STA 291+73 | TO | STA 292+93* | No. 4 |
| STA. 301 + 37.0 | TO | STA. 307+95.0 | No. 10 |
| STA. 322+96 | TO | STA. 325+00 | No. 12 |

CUT SECTION (RT.)

* Note: Tapers from 0'-0" at 291+73 to 12'-0" at 292+93
** Note: Tapers from 12'-0" at 322+96 to 0'-0" at 325+00



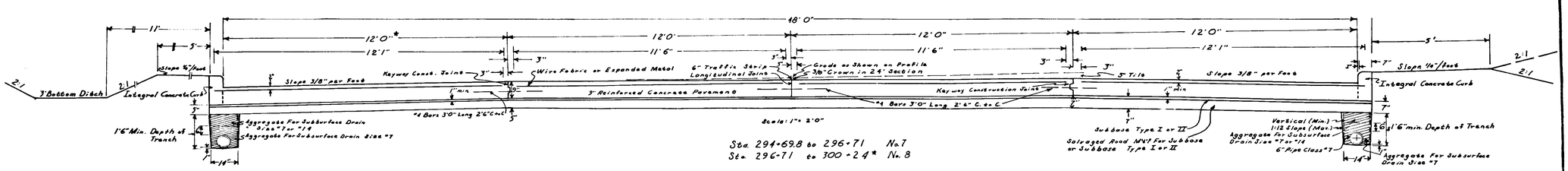

Scale: 1" = 3'-0"

Sta. 27+65 to Sta. 38+67.11 *** No. 1

* Note: Tapers from 9'-0" at Sta. 27+65.0 to 15'-0" at Sta. 29+15.0 & from 15'-0" at Sta. 35+72.5 to 9'-0" at Sta. 37+72.2

** Note: Tapers from 9'-0" at Sta. 27+65.0 to 15'-0" at Sta. 29+00 & from 15'-0" at Sta. 34+67.11 to 9'-0" at Sta. 36+67.11

*** Sta. 27+65 to 30+00 Special Integral Conc. Curb reqd on Rt. Pavement widths as given are to face of curb. For Detail See Sheet #23




Scale: 1" = 2'-0"

Sta. 294+69.8 to 296+71 No. 7
Sta. 296+71 to 300+24* No. 8

* Note: Varies from 12'-0" at 299+04 to 0'-0" at 300+24. There is to be no curb on this taper. Use shoulder section shown on left for typical section #2.

* Sta. 296+71 to 299+94 no curb on right. Use Shoulders for cut and fill shown on typical section above.

# TYPICAL CROSS SECTIONS

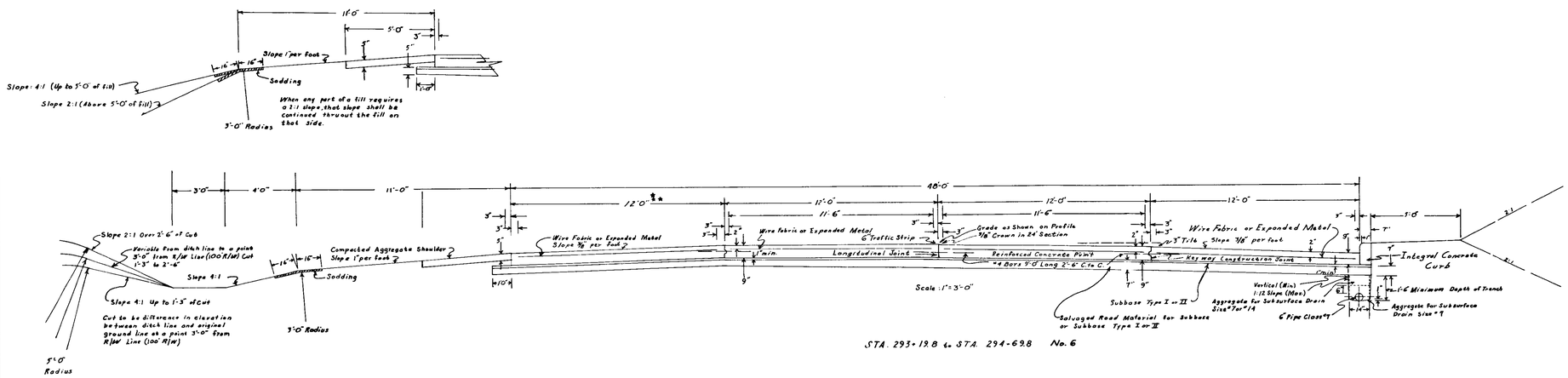
SCALE.- AS SHOWN

APPROVED Carl E. Vogelgesang
CHIEF ENGINEER

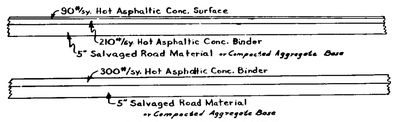
APPROVED John Peter
ENGINEER OF DESIGN

RECOMMENDED FOR APPROVAL 5-26-59
W. H. Behrens
ENGINEER OF TRAFFIC AND SAFETY

| FEDERAL ROAD NO | STATE | F PROJ NO | FISCAL YEAR | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(1) | 1959 | 4A | 165 |




STA. 293+19.8 to STA. 294-69.8 No. 6




PUBLIC ROAD APPROACHES

PRIVATE DRIVES & MAIL BOX APPROACHES

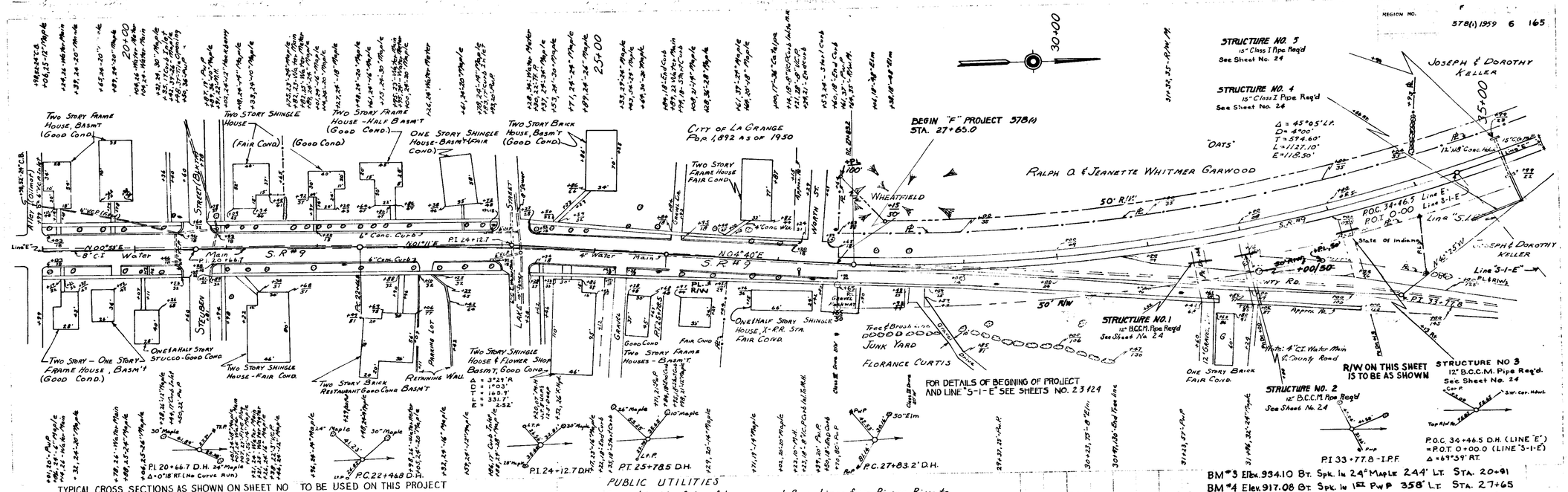
# TYPICAL CROSS SECTIONS

SCALE: AS SHOWN

APPROVED Carl E. Vogelgesang
CHIEF ENGINEER STATE HIGHWAY COMMISSION OF INDIANA

APPROVED
ENGINEER OF DESIGN STATE HIGHWAY COMMISSION OF INDIANA

RECOMMENDED FOR APPROVAL 5-26-59
W. F. Behrens
ENGINEER OF ROAD DESIGN STATE HIGHWAY COMMISSION OF INDIANA




TYPICAL CROSS SECTIONS AS SHOWN ON SHEET NO TO BE USED ON THIS PROJECT

State Highway Department of Indiana Standard Specifications dated 1957 to be used with these plans

Standards under dates as listed in index on Title Sheet to be used on this project.

Grade line as shown on profile represents top of finished surface

All ditches of 1% and over shall be sodded except where ditch is in rock cut or where Paved Side Ditch is to be constructed.

All shoulders, cut and fill slopes shall be plain or mulched seeded except where sodding is specified.

Shoulders are to be sodded as shown on Miscellaneous Standard Sheet "B".

Sodding shall be placed along paved side ditch as shown on Miscellaneous Standard Sheet "E".

Excavation quantities as shown on plan and profile sheets include estimated excavation for private and public approaches. (See table on Sheets No. 33 and 36)

Contraction joints shall be placed at the beginning and end of all radii at street and alley intersections.

Contraction joints shall be placed at all manholes within pavement limits.

Curves of 1° and over shall be superelevated according to the Standards of 1932.

All Corrugated metal pipe used on this project shall be Bituminous coated.

Public Road Approaches shall be constructed to a depth of 8". The top 3.0 inches shall consist of Hot Aspholtic Concrete, and the bottom 5 inches shall consist of salvaged Road Material or Comp Aggreg. Base. Other Details to be the Same as shown on Miscellaneous Standard Sheet "J" See Sheet No. 4A For Typical Section

Private Drive and Mail Box approaches shall be constructed to a depth of 6 inches. The top 3 inches shall consist of Hot Asphaltic Concrete and the bottom 3 inches shall consist of Salvaged Road Material or Comp Aggregate Base. Other details to be the same as shown on Miscellaneous Standard Sheets "B" and "H". See Sheet No. 4A For Typical Section

For kinds of pipe permitted for each size and classification as shown in the structure notes, see Miscellaneous Standard Sheet "P".

County Roads to be turned back to County beyond R/W Markers as shown on the plans.

Private entrance headwalls shall be used to retain 4:1 slopes on Main Road and Public Road Approaches.

All present road surface to be salvaged except as shown on plan.

All special ditches to be 3'-0" bottom

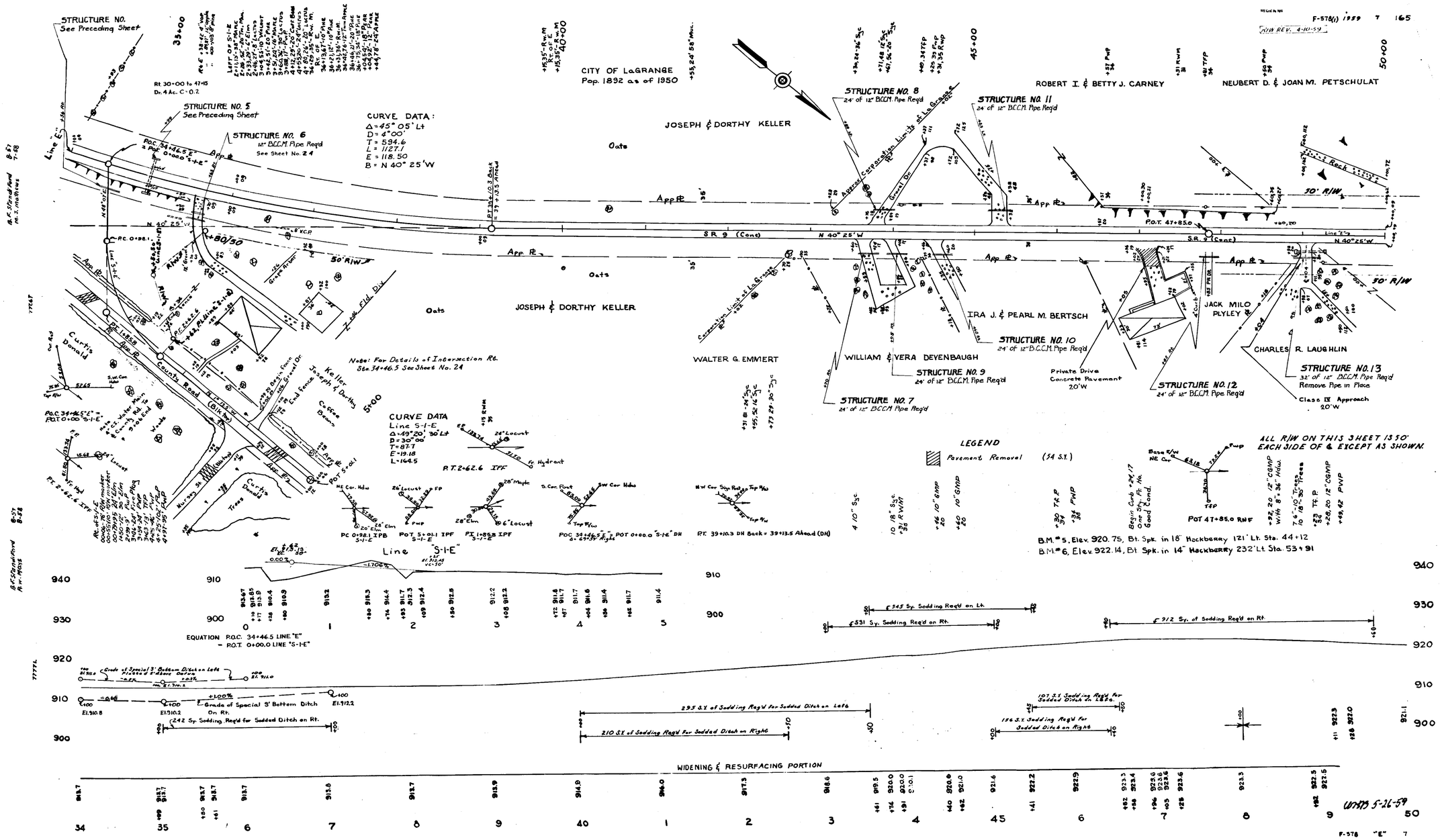
PUBLIC UTILITIES

Power & Lights - City of Lagrange and Power Lines from Pigeon River to end of project (sta. 284 to 41+84): Northern Indiana Public Service Co., Lagrange

Sewer & Water Lines, Lagrange: Owned & serviced by city of Lagrange.

Power Lines from Lagrange City Limits to Pigeon River (sta. 284): R.E.M.C., Lagrange.

All telephone lines on this project are owned and serviced by the United Telephone Co., Warsaw, Ind.

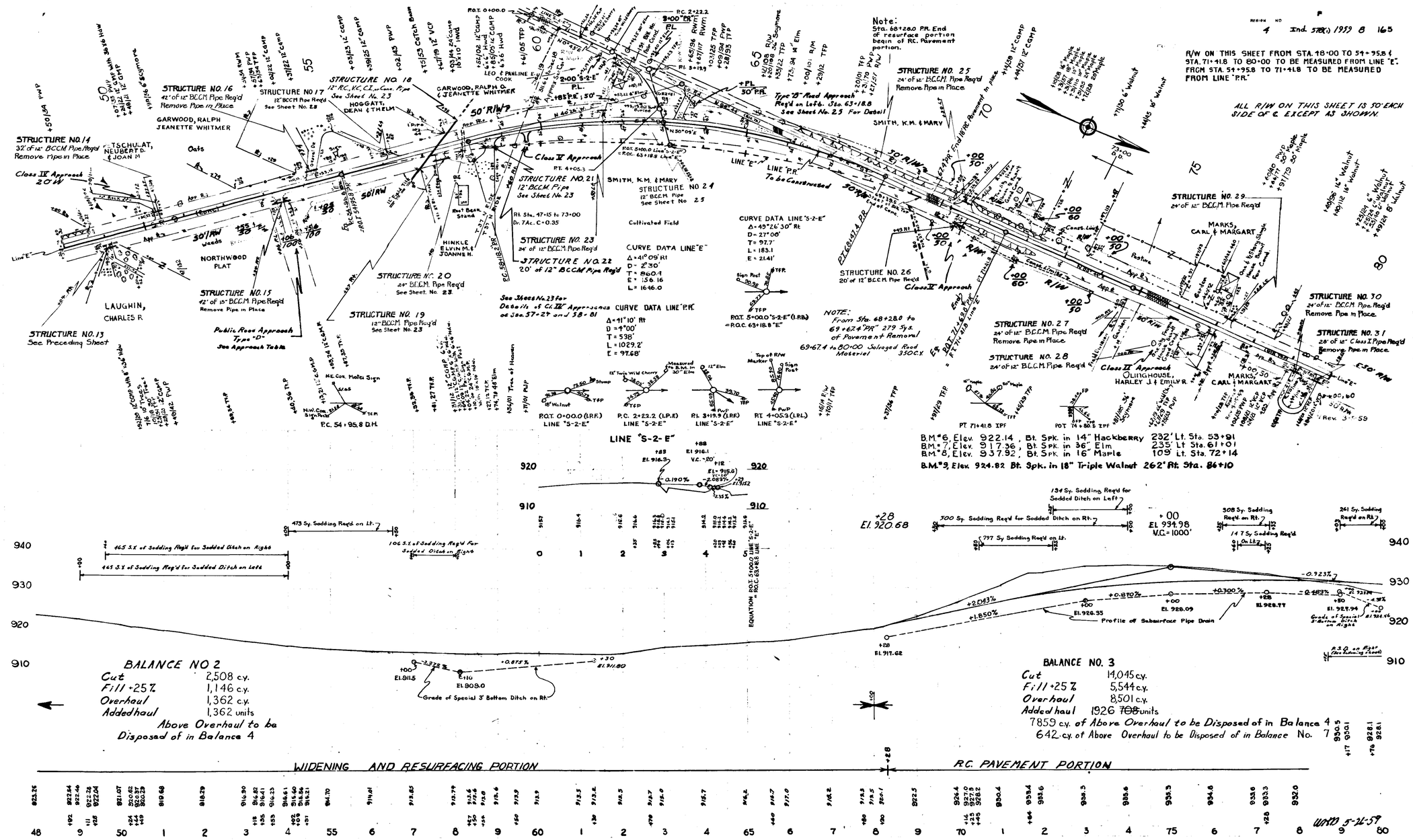

F-578(1) 1959 7 165
R/W REV. 4-10-59
STRUCTURE NO. See Preceding Sheet
STRUCTURE NO. 5 See Preceding Sheet
STRUCTURE NO. 6
12" B.C.C.M. Pipe Req'd
See Sheet No. 24
CURVE DATA:
Δ = 45° 05' Lt
D = 4° 00'
T = 594.6
L = 1127.1
E = 118.50
B = N 40° 25' W
CITY OF LaGRANGE
Pop. 1892 as of 1950
JOSEPH & DORTHY KELLER
STRUCTURE NO. 8
24" of 12" B.C.C.M. Pipe Req'd
STRUCTURE NO. 11
24" of 12" B.C.C.M. Pipe Req'd
ROBERT I. & BETTY J. CARNEY
NEUBERT D. & JOAN M. PETSCHULAT
Approx. Corporation Limits of LaGrange
Grand Dr.
Rock
50' R/W
S.R. 9 (Conc)
N 40° 25' W
P.O.T. 47+85.0
Line "S-1-E"
Oats
Corporation Limits of LaGrange
JOSEPH & DORTHY KELLER
IRA J. & PEARL M. BERTSCH
STRUCTURE NO. 10
24" of 12" B.C.C.M. Pipe Req'd
JACK MILO PLYLEY
CHARLES R. LAUGHLIN
STRUCTURE NO. 13
32" of 12" B.C.C.M. Pipe Req'd
Remove Pipe in Place
Class IX Approach
20'W
WALTER G. EMMERT
WILLIAM & VERA DEVENBAUGH
STRUCTURE NO. 9
24" of 12" B.C.C.M. Pipe Req'd
STRUCTURE NO. 7
24" of 12" B.C.C.M. Pipe Req'd
Private Drive
Concrete Pavement
20'W
STRUCTURE NO. 12
24" of 12" B.C.C.M. Pipe Req'd
Note: For Details of Intersection Rt. Sta. 34+46.5 See Sheet No. 24
Curtis Donald
County Road (Gilk Rd)
Joseph & Dorthy Keller
Coffee Beans
Nursery St.
Trees
CURVE DATA
Line S-1-E
Δ = 49° 20' 30" Lt
D = 30° 00'
T = 87.7
E = 19.18
L = 164.5
P.T. 2+62.6 IPF
Hydrant
LEGEND
Pavement Removal (34 S.Y.)
ALL R/W ON THIS SHEET 130' EACH SIDE OF ℄ EXCEPT AS SHOWN.
B.M. #5, Elev. 920.75, Bt. Spk. in 18" Hackberry 121' Lt. Sta. 44+12
B.M. #6, Elev. 922.14, Bt. Spk. in 14" Hackberry 232' Lt. Sta. 53+91
Line "S-1-E"
EQUATION P.O.C. 34+46.5 LINE "E" = P.O.T. 0+00.0 LINE "S-1-E"
Grade of Special 3' Bottom Ditch on Left
Grade of Special 3' Bottom Ditch On Rt.
(242 Sy. Sodding Req'd for Sodded Ditch on Rt.
545 Sy. Sodding Req'd on Lt.
531 Sy. Sodding Req'd on Rt.
912 Sy. of Sodding Req'd on Rt.
295 S.Y. of Sodding Req'd for Sodded Ditch on Left
210 S.Y. of Sodding Req'd for Sodded Ditch on Right
107 S.Y. Sodding Req'd for Sodded Ditch on Left
156 S.Y. Sodding Req'd for Sodded Ditch on Right
WIDENING & RESURFACING PORTION
WDHS 5-26-59
F-578 "E" 7

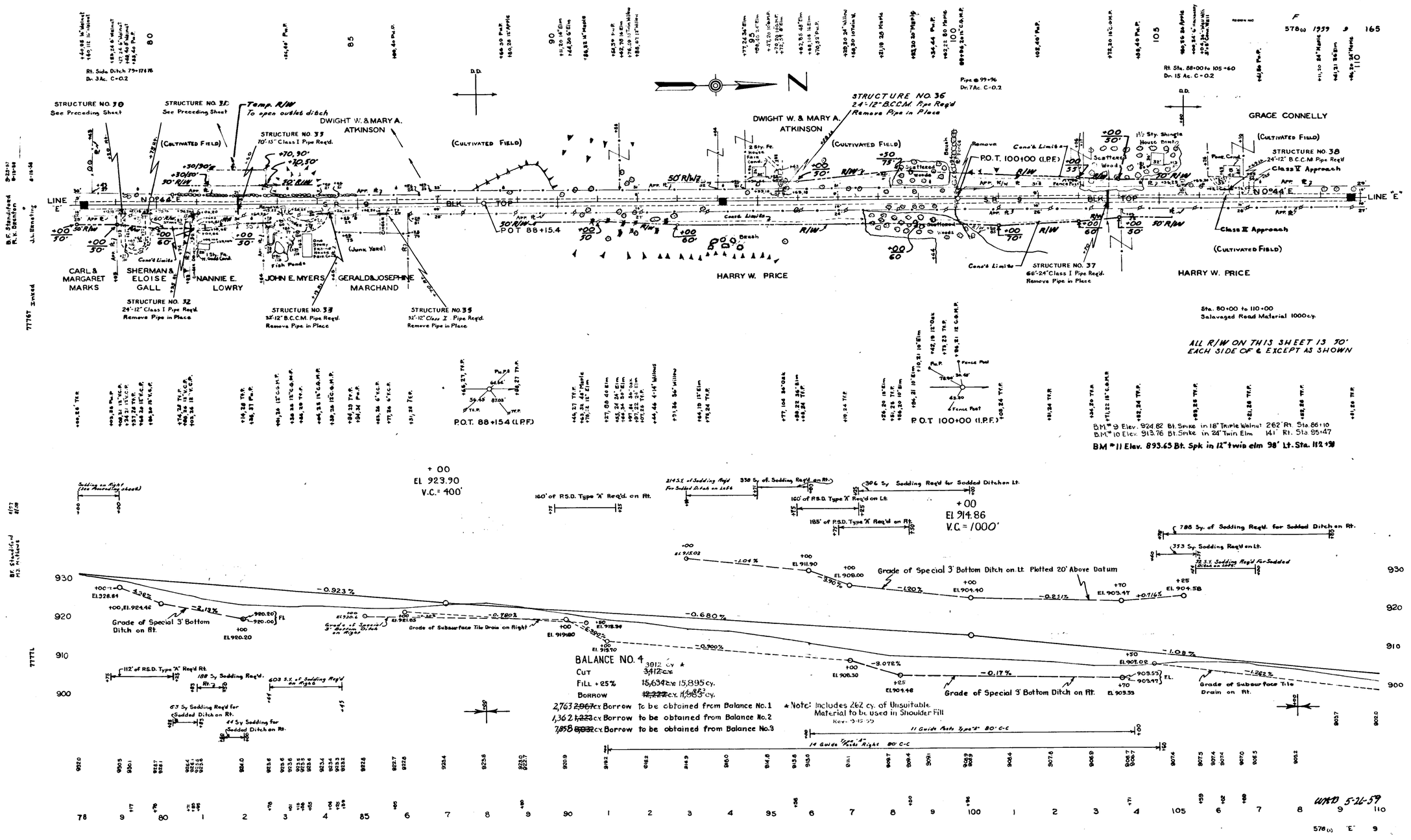
REGION NO 4 Ind. STR(1) 1959 8 165

R/W ON THIS SHEET FROM STA. 18+00 TO 54+95.8 & STA. 71+41.8 TO 80+00 TO BE MEASURED FROM LINE "E". FROM STA. 54+95.8 TO 71+41.8 TO BE MEASURED FROM LINE "P.R."

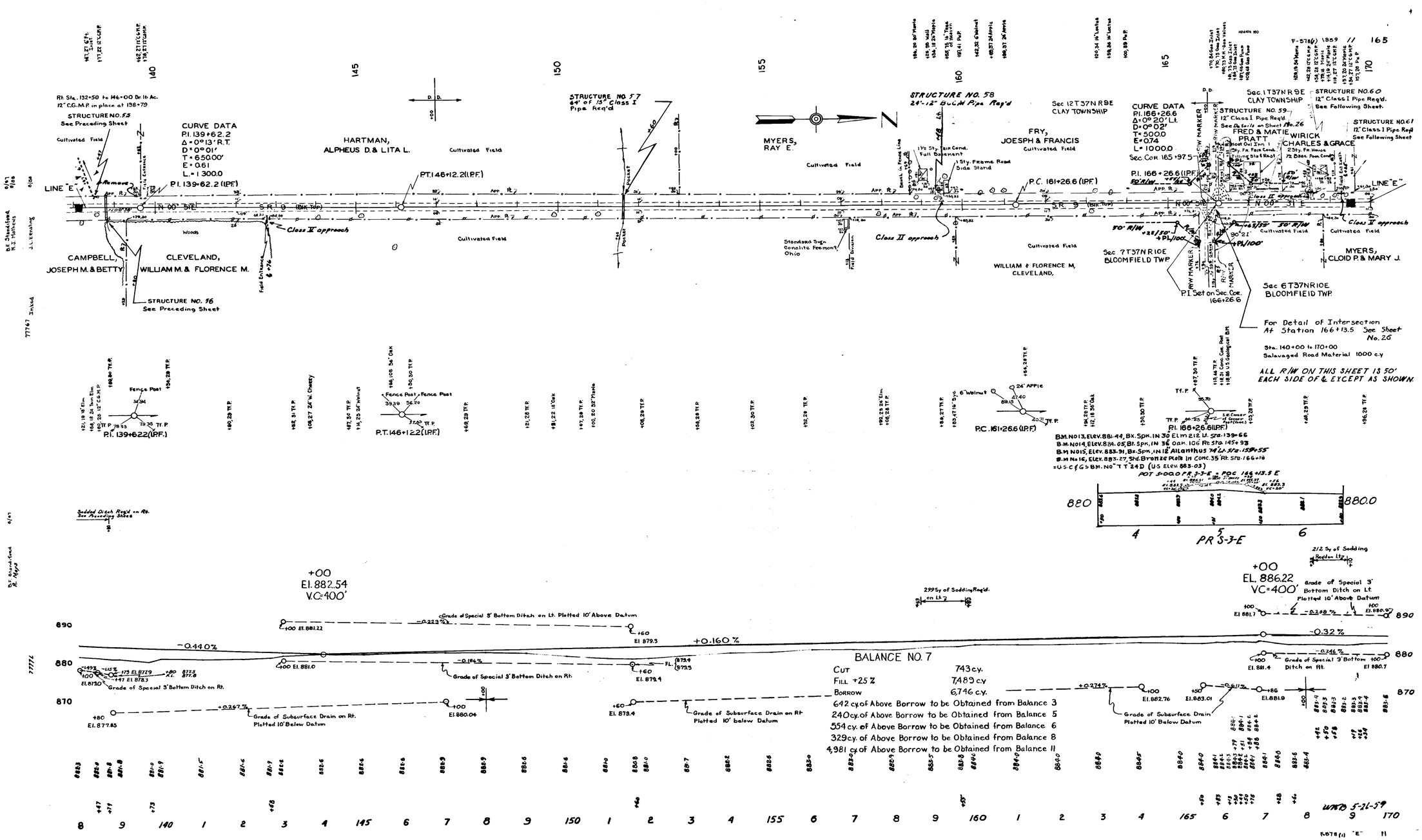
ALL R/W ON THIS SHEET IS 50' EACH SIDE OF ℄ EXCEPT AS SHOWN.

Note: Sta. 68+28.0 P.R. End of resurface portion begin of R.C. Pavement portion.

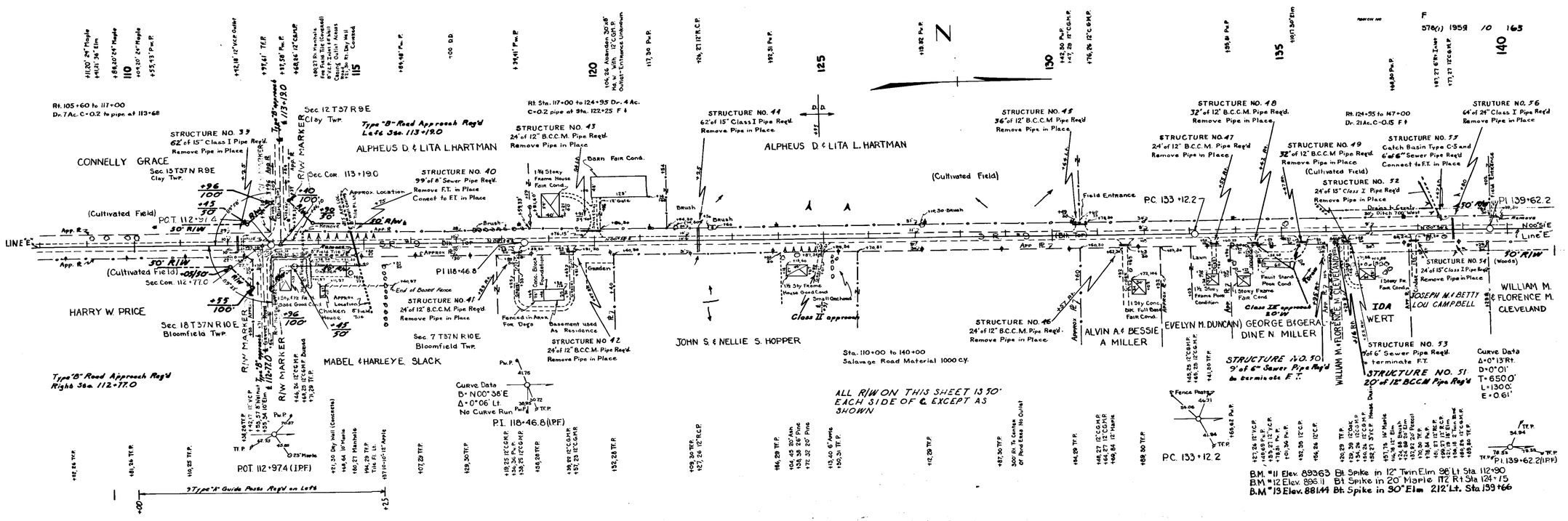


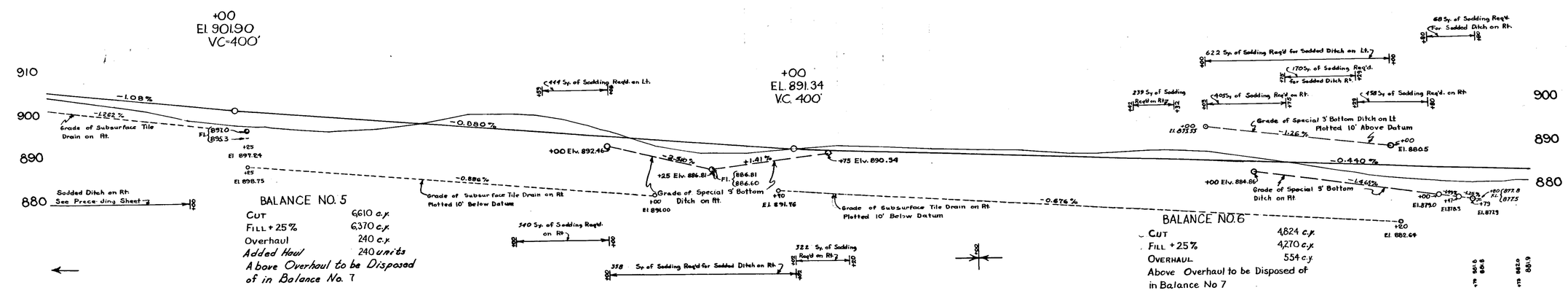


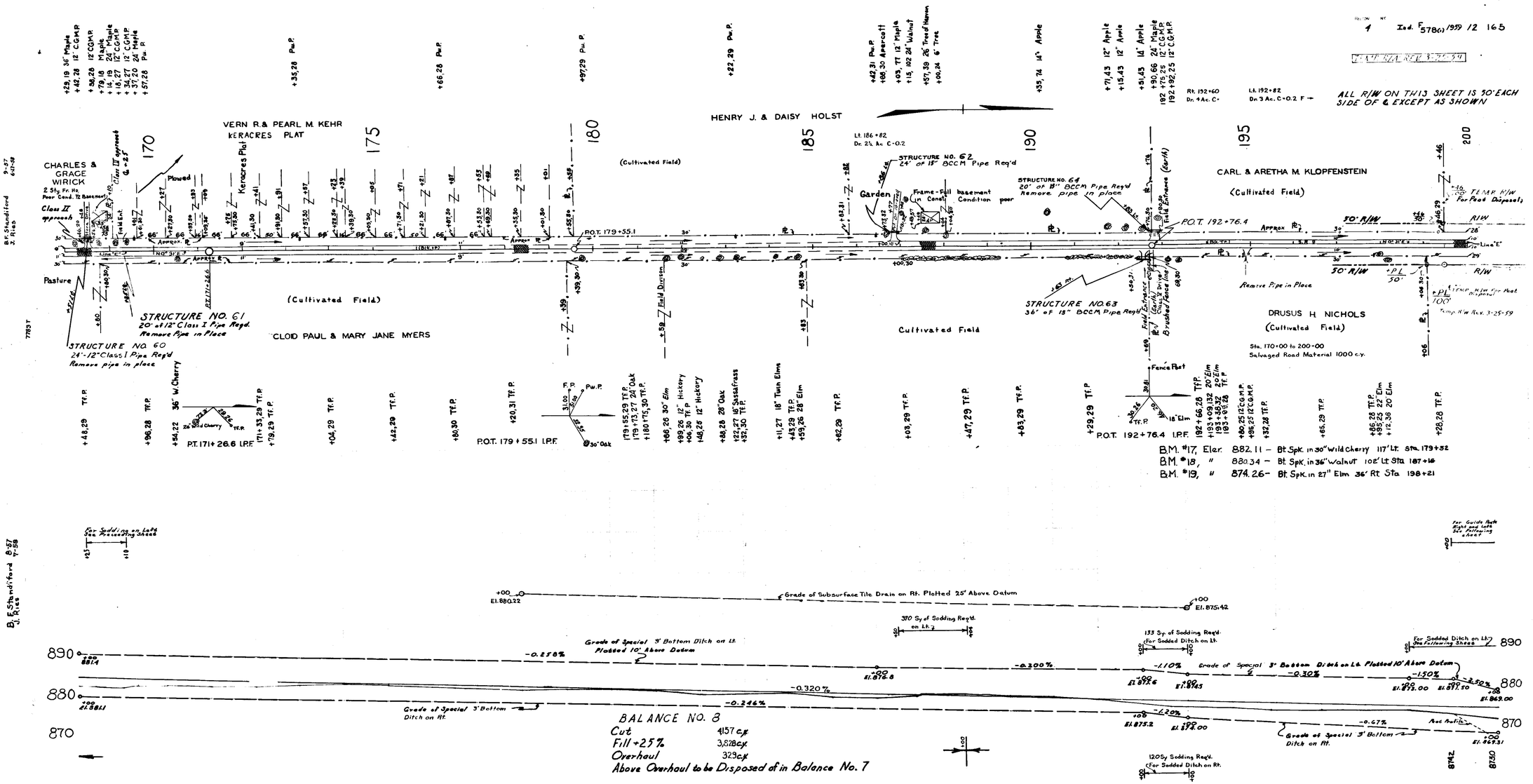
STRUCTURE NO. 30
See Preceding Sheet
STRUCTURE NO. 31
See Preceding Sheet
Temp. R/W
To open outlet ditch
STRUCTURE NO. 33
70'-15" Class I Pipe Req'd.
DWIGHT W. & MARY A. ATKINSON
(CULTIVATED FIELD)
STRUCTURE NO. 36
24'-12" B.C.C.M. Pipe Req'd
Remove Pipe in Place
DWIGHT W. & MARY A. ATKINSON
(CULTIVATED FIELD)
GRACE CONNELLY
(CULTIVATED FIELD)
STRUCTURE NO. 38
24'-12" B.C.C.M. Pipe Req'd
Class V Approach
LINE "E"
N 0°44' E
S.R. 9
BLK. TOP
P.O.T. 100+00 (I.P.F.)
POT 88+15.4
Class II Approach
(CULTIVATED FIELD)
CARL & MARGARET MARKS
SHERMAN & ELOISE GALL
NANNIE E. LOWRY
JOHN E. MYERS
GERALD & JOSEPHINE MARCHAND
HARRY W. PRICE
HARRY W. PRICE
STRUCTURE NO. 32
24'-12" Class I Pipe Req'd.
Remove Pipe in Place
STRUCTURE NO. 33
32'-12" B.C.C.M. Pipe Req'd.
Remove Pipe in Place
STRUCTURE NO. 35
32'-12" Class I Pipe Req'd.
Remove Pipe in Place
STRUCTURE NO. 37
66'-24" Class I Pipe Req'd.
Remove Pipe in Place
Sta. 80+00 to 110+00
Salvaged Road Material 1000 cy.
ALL R/W ON THIS SHEET IS 50' EACH SIDE OF ℄ EXCEPT AS SHOWN
P.O.T. 88+154 (I.P.F.)
P.O.T. 100+00 (I.P.F.)
BM # 9 Elev. 924.82 Bt. Spike in 18" Triple Walnut 262' Rt. Sta. 86+10
BM # 10 Elev. 913.76 Bt. Spike in 24" Twin Elm 141' Rt. Sta. 95+47
BM # 11 Elev. 893.65 Bt. Spk in 12" twin elm 98' Lt. Sta. 112+98
+00
El. 923.90
V.C. = 400'
+00
El. 914.86
V.C. = 1000'
Grade of Special 3' Bottom Ditch on Rt.
Grade of Special 3' Bottom Ditch on Lt. Plotted 20' Above Datum
Grade of Subsurface Tile Drain on Right
Grade of Special 3' Bottom Ditch on Rt.
Grade of Subsurface Tile Drain on Rt.
BALANCE NO. 4
CUT 3912 cy. ★
FILL +25% 15,634 cy. 15,895 cy.
BORROW 12,222 cy. 11,983 cy.
2,763 2,967 cy. Borrow to be obtained from Balance No. 1
1,362 1,223 cy. Borrow to be obtained from Balance No. 2
7,858 8,032 cy. Borrow to be obtained from Balance No. 3
★ Note: Includes 262 cy. of Unsuitable Material to be used in Shoulder Fill
11 Guide Posts Type "A" 80' C-C
14 Guide Posts Right 80' C-C
WAD 5-26-59

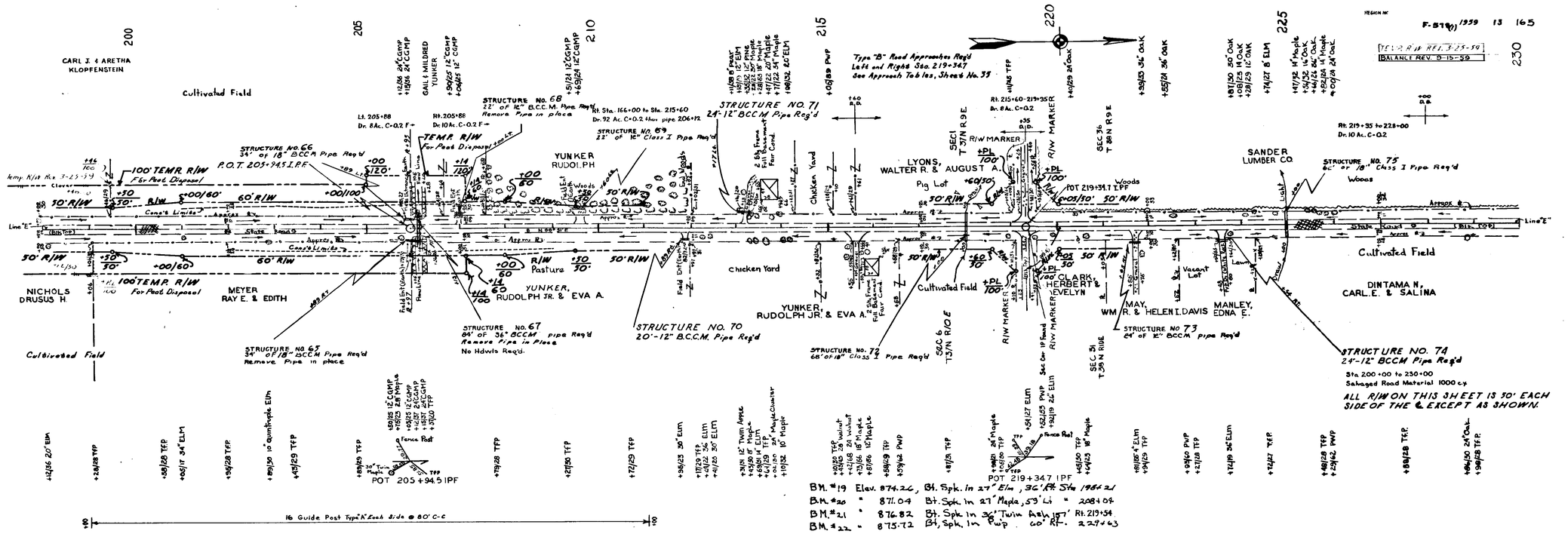


Rt. Sta. 132+50 to 146+00 Dr. 16 Ac.
12" C.G.M.P. in place at 138+79
STRUCTURE NO. 55
See Preceding Sheet
CURVE DATA
P.I. 139+62.2
Δ = 0°13' R.T.
D = 0°01'
T = 650.00'
E = 0.61
L = 1300.0
P.I. 139+62.2 (IPF)
LINE "E"
CAMPBELL, JOSEPH M. & BETTY
CLEVELAND, WILLIAM M. & FLORENCE M.
STRUCTURE NO. 56
See Preceding Sheet
HARTMAN, ALPHEUS D. & LITA L.
P.T. 146+12.2 (IPF)
STRUCTURE NO. 57
64' of 15" Class I Pipe Req'd
MYERS, RAY E.
STRUCTURE NO. 58
24'-12" B.C.M. Pipe Req'd
FRY, JOESPH & FRANCIS
P.C. 161+26.6 (IPF)
WILLIAM & FLORENCE M. CLEVELAND
CURVE DATA
P.I. 166+26.6
Δ = 0°20' Lt.
D = 0°02'
T = 500.0
E = 0.74
L = 1000.0
Sec. Cor. 165+97.5
P.I. 166+26.6 (IPF)
Sec. 1 T37N R9E CLAY TOWNSHIP
STRUCTURE NO. 59
12" Class I Pipe Req'd.
See Details on Sheet No. 26
FRED & MATIE PRATT
WIRICK CHARLES & GRACE
STRUCTURE NO. 60
12" Class I Pipe Req'd.
See Following Sheet.
STRUCTURE NO. 61
12" Class I Pipe Req'd
See Following Sheet
Sec. 7 T37N R10E BLOOMFIELD TWP.
P.I. Set on Sec. Cor. 166+26.6
Sec. 6 T37N R10E BLOOMFIELD TWP.
MYERS, CLOID P. & MARY J.
For Detail of Intersection At Station 166+13.5 See Sheet No. 26
Sta. 140+00 to 170+00
Salvaged Road Material 1000 c.y.
ALL R/W ON THIS SHEET IS 50' EACH SIDE OF ℄ EXCEPT AS SHOWN.
P.I. 139+62.2 (IPF)
P.T. 146+12.2 (IPF)
P.C. 161+26.6 (IPF)
P.I. 166+26.6 (IPF)
B.M. No 13, Elev. 881.44, Bx. Spk. in 30" Elm 212' Lt. Sta. 139+66
B.M. No 14, Elev. 884.05, Bt. Spk. in 36" Oak 106' Rt. Sta. 145+93
B.M. No 15, Elev. 883.91, Bx. Spk. in 12" Ailanthus 74' Lt. Sta. 159+55
B.M. No 16, Elev. 883.27, Std. Bronze Plate in Conc. 35' Rt. Sta. 166+18
= U.S.C.&G.S. B.M. No "T T" 24 D (U.S. Elev. 883.03)
POT S-00.0 PR S-3-E = POC 166+13.5 E
880
880.0
4
5
6
PR S-3-E
+00
El. 882.54
V.C. = 400'
+00
EL. 886.22
VC = 400'
Grade of Special 3' Bottom Ditch on Lt. Plotted 10' Above Datum
Grade of Special 3' Bottom Ditch on Rt.
Grade of Subsurface Drain on Rt. Plotted 10' Below Datum
Grade of Subsurface Drain on Rt. Plotted 10' below Datum
-0.440%
+0.160%
-0.32%
890
880
870
BALANCE NO. 7
CUT 743 c.y.
FILL +25% 7,489 c.y.
BORROW 6,746 c.y.
642 c.y. of Above Borrow to be Obtained from Balance 3
240 c.y. of Above Borrow to be Obtained from Balance 5
554 c.y. of Above Borrow to be Obtained from Balance 6
329 c.y. of Above Borrow to be Obtained from Balance 8
4,981 c.y. of Above Borrow to be Obtained from Balance 11
WKB 5-26-59

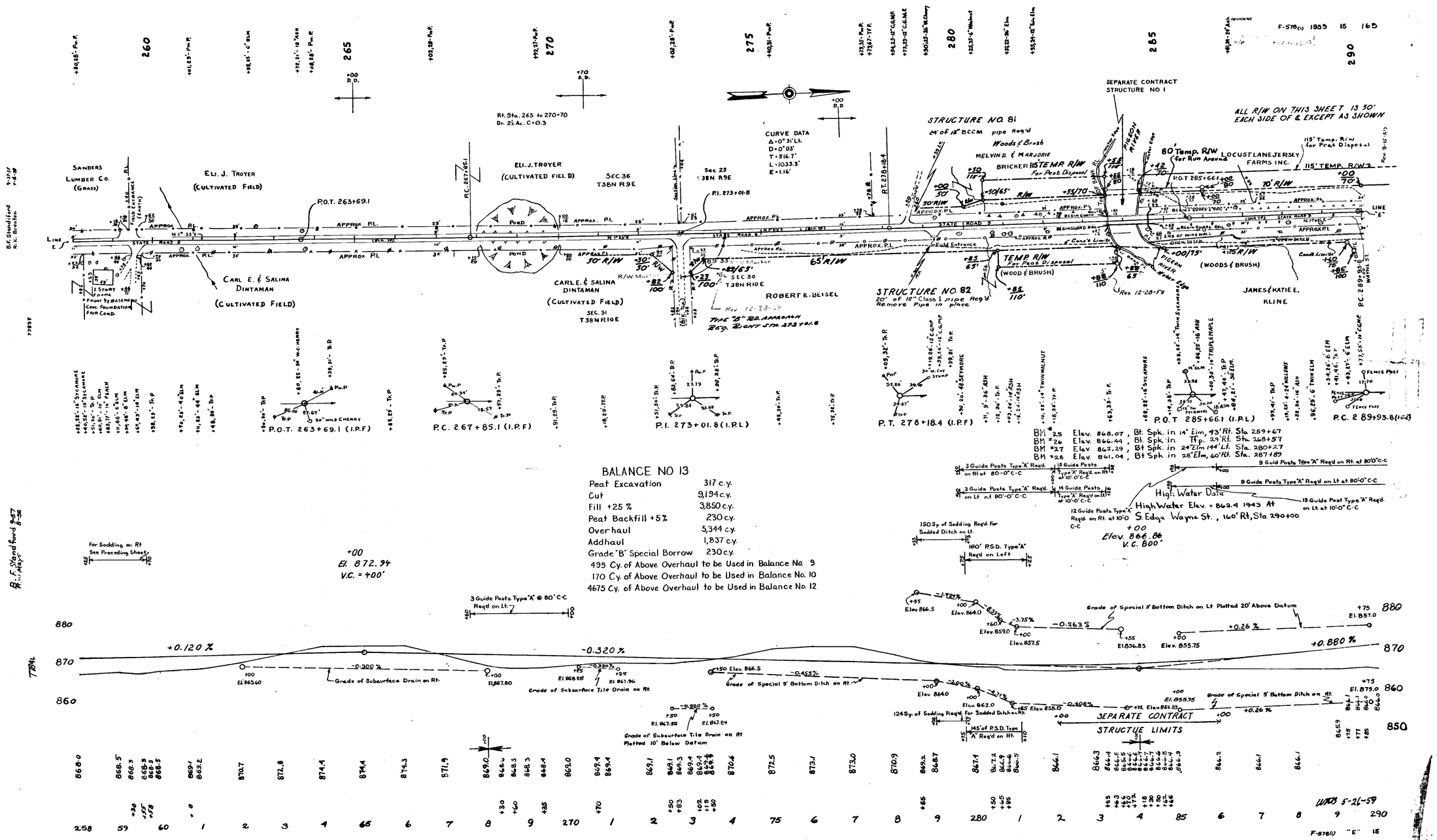

Rt. 105+60 to 117+00
Dr. 7 Ac. C=0.2 to pipe at 113+68
STRUCTURE NO. 39
62' of 15" Class I Pipe Req'd.
Remove Pipe in Place
CONNELLY GRACE
Sec. 13 T37 N R9E
Clay Twp.
Sec. 12 T37 R9E
Clay Twp.
Type "B" Road Approach Req'd
Left Sta. 113+19.0
ALPHEUS D. & LITA L. HARTMAN
Sec. Cor. 113+19.0
STRUCTURE NO. 40
99' of 8" Sewer Pipe Req'd.
Remove F.T. in Place
Connect to F.T. in Place
Rt. Sta. 117+00 to 124+95 Dr. 4 Ac.
C=0.2 pipe at Sta. 122+25 F.t.
STRUCTURE NO. 43
24' of 12" B.C.C.M. Pipe Req'd.
Remove Pipe in Place
STRUCTURE NO. 44
62' of 15" Class I Pipe Req'd.
Remove Pipe in Place
ALPHEUS D. & LITA L. HARTMAN
STRUCTURE NO. 45
36' of 12" B.C.C.M. Pipe Req'd
Remove Pipe in Place
STRUCTURE NO. 48
32' of 12" B.C.C.M. Pipe Req'd.
Remove Pipe in Place
STRUCTURE NO. 47
24' of 12" B.C.C.M. Pipe Req'd
Remove Pipe in Place
STRUCTURE NO. 49
32' of 12" B.C.C.M. Pipe Req'd.
Remove Pipe in Place
STRUCTURE NO. 52
24' of 15" Class I Pipe Req'd
Remove Pipe in Place
Rt. 124+35 to 147+00
Dr. 21 Ac. C=0.15 F.t.
STRUTURE NO. 56
64' of 24" Class I Pipe Req'd
Remove Pipe in Place
STRUCTURE NO. 53
Catch Basin Type C-5 and
6' of 6" Sewer Pipe Req'd
Connect to F.T. in Place
(Cultivated Field)
P.C.T. 112+91.2
50' R/W
App. R
LINE "E"
Sec. Cor. 112+77.0
HARRY W. PRICE
Sec. 18 T37 N R10E
Bloomfield Twp.
R/W MARKER
Approx. Location
Chicken Fields
STRUCTURE NO. 41
24' of 12" B.C.C.M. Pipe Req'd.
Remove Pipe in Place
P.I. 118+46.8
End of Board Fence
Sec. 7 T37 N R10E
Bloomfield Twp.
MABEL & HARLEY E. SLACK
Barn Fair Cond.
Fenced in Area For Dogs
Basement used As Residence
STRUCTURE NO. 42
24' of 12" B.C.C.M. Pipe Req'd.
Remove Pipe in Place
JOHN S. & NELLIE S. HOPPER
Class II approach
Sta. 110+00 to 140+00
Salvage Road Material 1000 C.Y.
STRUCTURE NO. 46
24' of 12" B.C.C.M. Pipe Req'd.
Remove Pipe in Place
ALVIN A. & BESSIE A. MILLER
P.C. 133+12.2
Field Entrance
EVELYN M. DUNCAN
GEORGE B. & GERALDINE N. MILLER
Class II approach 20' W
STRUCTURE NO. 50
9' of 6" Sewer Pipe Req'd
to terminate F.T.
STRUCTURE NO. 51
20' of 12" B.C.C.M. Pipe Req'd
WILLIAM M. & FLORENCE M. CLEVELAND
IDA WERT
JOSEPH M. & BETTY LOU CAMPBELL
WILLIAM M. & FLORENCE M. CLEVELAND
STRUCTURE NO. 53
9' of 6" Sewer Pipe Req'd.
to terminate F.T.
Curve Data
Δ=0°13' Rt.
D=0°01'
T=650.0'
L=1300.0'
E=0.61'
P.I. 139+62.2
Type "B" Road Approach Req'd
Right Sta. 112+77.0
Curve Data
B=N00°38'E
Δ=0°06' Lt.
No Curve Run
P.I. 118+46.8 (1PF)
P.O.T. 112+97.4 (1PF)
37 Type "A" Guide Posts Req'd on Left
ALL R/W ON THIS SHEET 13.50' EACH SIDE OF ℄ EXCEPT AS SHOWN
B.M. #11 Elev. 893.63 Bt. Spike in 12" Twin Elm 96' Lt. Sta. 112+90
B.M. #12 Elev. 896.11 Bt. Spike in 20" Maple 112' Rt. Sta. 124+15
B.M. #13 Elev. 881.44 Bt. Spike in 30" Elm 212' Lt. Sta. 139+66


+00
El. 901.90
VC=400'
+00
El. 891.34
VC. 400'
-1.08%
-1.282%
-0.880%
Grade of Subsurface Tile Drain on Rt.
+00 Elv. 892.46
+25 Elv. 886.81
+75 Elv. 890.34
Grade of Special 3' Bottom Ditch on Rt.
Grade of Subsurface Tile Drain on Rt. Plotted 10' Below Datum
-0.886%
-0.676%
-0.440%
+00 Elv. 884.86
Grade of Special 3' Bottom Ditch on Rt.
Grade of Special 3' Bottom Ditch on Lt. Plotted 10' Above Datum
Sodded Ditch on Rt. See Preceding Sheet
444 Sy. of Sodding Req'd. on Lt.
540 Sy. of Sodding Req'd. on Rt.
322 Sy. of Sodding Req'd on Rt.
358 Sy. of Sodding Req'd for Sodded Ditch on Rt.
622 Sy. of Sodding Req'd for Sodded Ditch on Lt.
1705 Sy. of Sodding Req'd. for Sodded Ditch Rt.
239 Sy. of Sodding Req'd on Rt.
405 Sy. of Sodding Req'd on Rt.
458 Sy. of Sodding Req'd. on Rt.
68 Sy. of Sodding Req'd. For Sodded Ditch on Rt.
BALANCE NO. 5
Cut 6,610 c.y.
Fill + 25% 6,370 c.y.
Overhaul 240 c.y.
Added Haul 240 units
Above Overhaul to be Disposed of in Balance No. 7
BALANCE NO. 6
Cut 4,824 c.y.
Fill + 25% 4,270 c.y.
Overhaul 554 c.y.
Above Overhaul to be Disposed of in Balance No 7
WHD 5-26-59


Ind. F. 578(6) 1959 12 165
ALL R/W ON THIS SHEET IS 30' EACH SIDE OF ℄ EXCEPT AS SHOWN
HENRY J. & DAISY HOLST
VERN R. & PEARL M. KEHR
KERACRES PLAT
CHARLES & GRACE WIRICK
CARL & ARETHA M. KLOPFENSTEIN
(Cultivated Field)
DRUSUS H. NICHOLS
CLOID PAUL & MARY JANE MYERS
STRUCTURE NO. 61
20' of 12" Class I Pipe Req'd.
Remove Pipe in Place
STRUCTURE NO. 60
24'-12" Class I Pipe Req'd
Remove pipe in place
STRUCTURE NO. 62
24' of 18" BCCM Pipe Req'd
STRUCTURE NO. 64
20' of 18" BCCM Pipe Req'd
Remove pipe in place
STRUCTURE NO. 63
36' of 18" BCCM Pipe Req'd
P.O.T. 179+55.1
P.O.T. 192+76.4
Sta. 170+00 to 200+00
Salvaged Road Material 1000 c.y.
B.M. #17, Elev. 882.11 – Bt. Spk. in 30" wild cherry 117' Lt. Sta. 179+32
B.M. #18, " 880.34 – Bt. Spk. in 36" walnut 102' Lt. Sta. 187+16
B.M. #19, " 874.26 – Bt. Spk. in 27" elm 36' Rt. Sta. 198+21
Grade of Subsurface Tile Drain on Rt. Plotted 25' Above Datum
Grade of Special 3' Bottom Ditch on Lt. Plotted 10' Above Datum
Grade of Special 3' Bottom Ditch on Rt.
BALANCE NO. 8
Cut 4157 c.y.
Fill +25% 3,878 c.y.
Overhaul 329 c.y.
Above Overhaul to be Disposed of in Balance No. 7
WTRD 5-26-59


CARL J. & ARETHA KLOPFENSTEIN
Cultivated Field
STRUCTURE No. 66
34" of 18" B.C.C.M. Pipe Req'd
P.O.T. 205+94.5 I.P.F.
100' TEMP. R/W For Peat Disposal
STRUCTURE No. 67
34" of 18" B.C.C.M. Pipe Req'd
Remove Pipe in place
NICHOLS DRUSUS H
MEYER RAY E. & EDITH
YUNKER, RUDOLPH JR. & EVA A.
STRUCTURE No. 68
22' of 18" B.C.C.M. Pipe Req'd
Remove Pipe in place
STRUCTURE No. 69
22' of 18" Class I Pipe Req'd
STRUCTURE No. 70
20'-12" B.C.C.M. Pipe Req'd
STRUCTURE No. 71
24'-12" BCCM Pipe Req'd
YUNKER RUDOLPH
Chicken Yard
Type "B" Road Approaches Req'd Left and Right Sta. 219+347
See Approach Tables, Sheet No. 35
LYONS, WALTER R. & AUGUST A.
Pig Lot
R/W MARKER
CLARK, HERBERT & EVELYN
MAY, WM. R. & HELEN I. DAVIS
MANLEY, EDNA F.
STRUCTURE No. 72
68' of 18" Class I Pipe Req'd
STRUCTURE No. 73
24' of 12" BCCM Pipe Req'd
SANDER LUMBER CO.
STRUCTURE No. 75
36" or 18" Class I Pipe Req'd
DINTAMAN, CARL E. & SALINA
STRUCTURE NO. 74
24'-12" BCCM Pipe Req'd
Sta. 200+00 to 230+00
Salvaged Road Material 1000 c.y.
ALL R/W ON THIS SHEET IS 30' EACH SIDE OF THE ℄ EXCEPT AS SHOWN.
POT 205+94.5 IPF
POT 219+34.7 IPF
16 Guide Post Type "A" Each Side @ 80' C-C
BM. #19 Elev. 874.26, Bt. Spk. in 27" Elm, 36' Rt. Sta. 198+21
BM. #20 " 871.04 Bt. Spk. in 27" Maple, 59' Lt. " 208+04
BM. #21 " 876.82 Bt. Spk. in 36" Twin Ash, 87' Rt. 219+54
BM. #22 " 875.72 Bt. Spk. in Pump 60' Rt. 227+63
+00 El. 873.74 V.C. 400'
+50 El. 877.52 V.C. 1000'
Grade of Special 3' Bottom ditch on Lt Plotted 10' Above Datum
Grade 3' Bottom Ditch Lt. Plotted 10' Above Datum
Grade of Subsurface Drain on Rt. Plotted 10' Above Datum
Grade of Special 3' Bottom Ditch on Rt.
Grade of Subsurface Tile Drain on Rt. Plotted 10' Below Datum
Peat Profile
Grade of Special 3' Bottom Ditch on Right
Grade of Subsurface Drain on Rt. Plotted 10' Below Datum
BALANCE NO. 9
Peat Excavation 2408 c.y.
Cut 5235 c.y.
Fill +25% 6500 c.y.
Peat Backfill +5% 4320 c.y.
Borrow 1265 c.y.
Grade "B" Special Borrow 4329 c.y. 4320 c.y.
766 cy of Above Borrow to be Obtained From Balance No. 11
499 cy of Above Borrow to be Obtained From Balance No. 13
BALANCE NO. 10
Cut 3679 c.y.
Fill +25% 3849 c.y.
Borrow 170 c.y.
Above Borrow to be Obtained From Balance No. 13
WRD 5-26-59

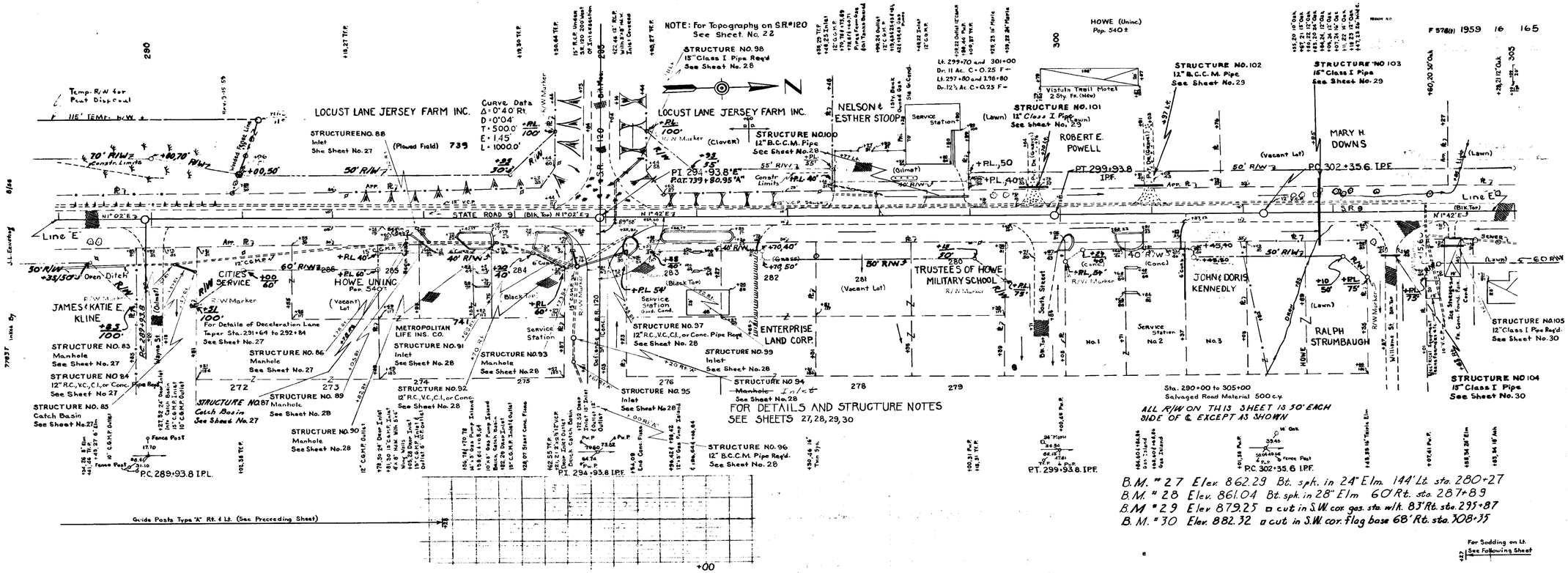
IND. F-578 1959 14 165
STRUCTURE NO. 76
36' of 12" BCCM Pipe Req'd
Remove Pipe in place
SANDERS LUMBER CO.
(WOODS)
SANDERS LUMBER CO.
(PASTURE)
140' TEMP. R/W
For Peat Disposal
10, 12-24" OAK TREES
FLOYD J. & MARY J. GUNTHERP
PASTURE
STRUCTURE NO. 78
22' of 12" BCCM Pipe Req'd
Remove Pipe in place
IRA J. & GRAYCE LEER
CULTIVATED FIELD
STRUCTURE NO. 79
28' of 12" Class I Pipe Req'd
Remove Pipe in place
SANDERS LUMBER CO.
(GRASS)
(GRASS)
LINE "E"
N0°31'E
P.O.T. 232+67.8
CULTIVATED FIELD
WOODS
P.C. 240+69.0
WOODS
140' TEMP. R/W
For Peat Disposal
P.I. 245+85.7
CURVE DATA
Δ=19°02' RT.
T=516.7'
D=0°06'
L=1033.3'
E=2.33'
P.T. 251+02.3
CULTIVATED FIELD
STRUCTURE NO. 77
20' of 12" BCCM Pipe Req'd
Remove Pipe in place
CARL E. & SALINA DINTAMAN
STRUCTURE NO. 80
78' of 30" Class I pipe Req'd
Remove pipe in place
ALL R/W ON THIS SHEET IS 50'
EACH SIDE OF ℄ EXCEPT AS SHOWN
P.O.T. 232+67.8 (I.P.F.)
P.C. 240+69.0 (I.P.F.)
P.I. 245+85.7 (I.P.F.)
P.T. 251+02.3 (I.P.F.)
BM #22 Elev. 873.72 - Bt. Spk. in Pw.P. 60' Rt. Sta. 229+63
BM #23 " 869.56 - Bt. Spk. in 14" Twin Syc. 58' Rt. Sta. 239+94
BM #24 " 870.47 - Bt. Spk. in 18" Twin Syc. 18' Lt. Sta. 249+70
BM #25 " 868.07 - Bt. Spk. in 14" Elm 43' Rt. Sta. 259+67
+00
El. 873.18
VC=400'
+00
El. 870.78
VC=400'
Grade of Special 3' Bottom Ditch on Lt. Plotted 10' Above Datum
Grade of Special 3' Bottom Ditch on Rt.
Grade of Special 3' Bottom Ditch on Right
Peat Profile
Grade of Subsurface Tile Drain on Rt. Plotted 10' Below Datum
-0.280%
-0.20%
-1.00%
-0.50%
-0.451%
+0.120%
-0.308%
-2.637%
-2.66%
-2.00%
BALANCE NO. 11
Peat Excavation 6,019 c.y.
Cut 8,555 c.y.
Fill + 25% 2,808 c.y.
Peat Backfill + 5% 8,556 c.y.
Overhaul 5,747 c.y.
Added haul 15,709 units
Grade "B" Special Borrow 8,556 c.y.
766 c.y. of Above Overhaul to be Used in Balance No. 9
4981 c.y. of Above Overhaul to be Used in Balance No. 7
BALANCE NO. 12
Cut 5,622 c.y.
Fill + 25% 10,301 c.y.
Borrow 4,679 c.y.
4,675 cy of Above Borrow to be Obtained from Balance No. 13
880
870
860
850
28 29 230 31 32 33 34 235 36 37 38 39 240 41 42 43 44 245 46 47 48 49 250 51 52 53 54 255 56 57 58 59 260
WRD 5-26-59

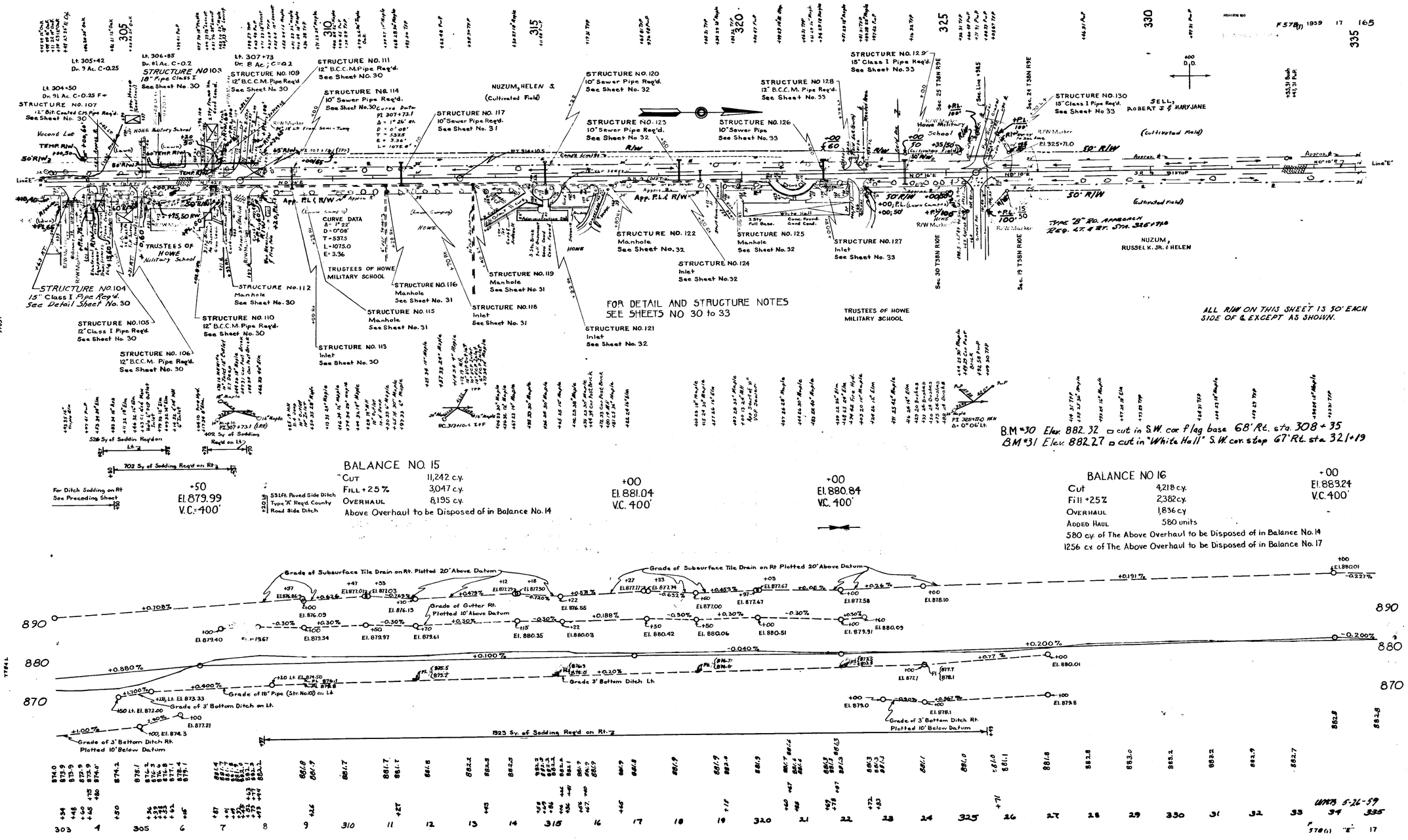



## BALANCE NO 13

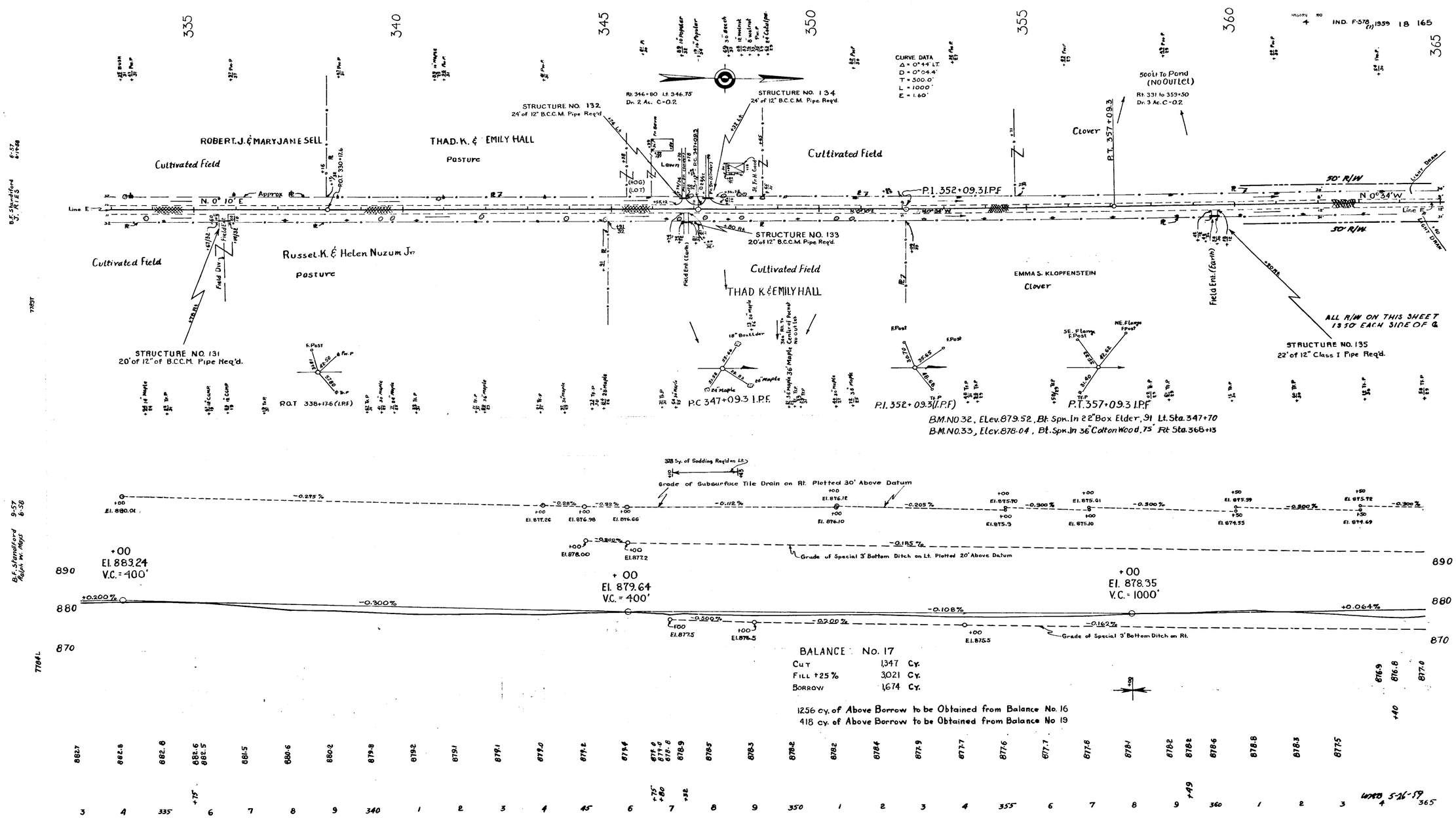
| | |
|---|---|
| Peat Excavation | 317 c.y. |
| Cut | 9,194 c.y. |
| Fill +25 % | 3,850 c.y. |
| Peat Backfill +5 % | 230 c.y. |
| Overhaul | 5,344 c.y. |
| Addhaul | 1,837 c.y. |
| Grade "B" Special Borrow | 230 c.y. |

499 Cy. of Above Overhaul to be Used in Balance No. 9
170 Cy. of Above Overhaul to be Used in Balance No. 10
4675 Cy. of Above Overhaul to be Used in Balance No. 12

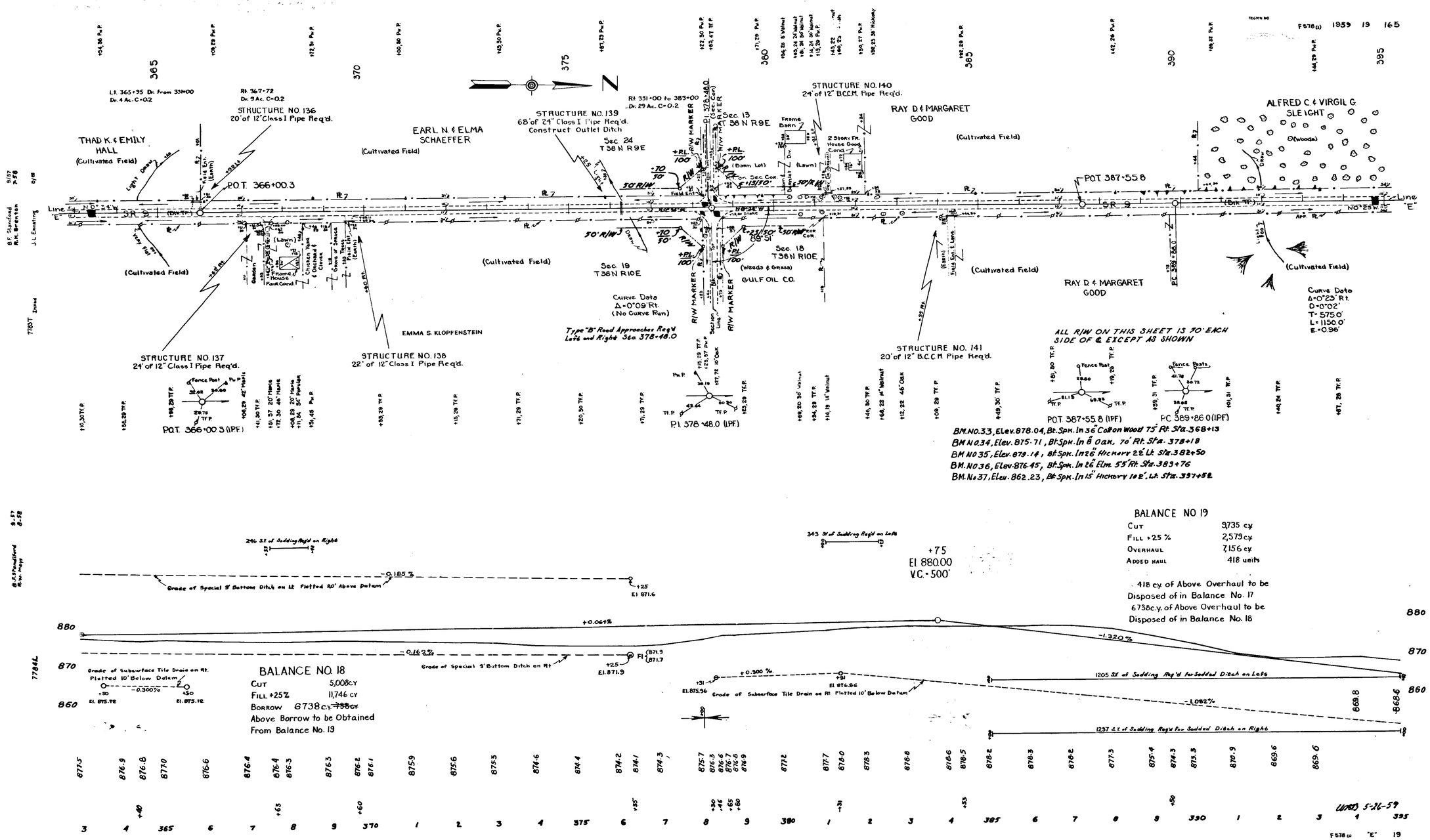

NOTE: For Topography on S.R.#120 See Sheet No. 22
STRUCTURE NO. 98 15" Class I Pipe Req'd See Sheet No. 28
Temp. R/W for Peat Disposal
LOCUST LANE JERSEY FARM INC.
STRUCTURE NO. 88 Inlet See Sheet No. 27
(Plowed Field) 739
Curve Data Δ=0°40' Rt. D=0°04' T=500.0' E=1.45' L=1000.0'
LOCUST LANE JERSEY FARM INC.
(Clover)
STRUCTURE NO. 100 12" B.C.C.M. Pipe See Sheet No. 29
PI 294+93.8 E Pat. 739+50.95 "A"
NELSON & ESTHER STOOPS
Service Station
(Lawn)
STRUCTURE NO. 101 12" Class I Pipe See Sheet No. 29
ROBERT E. POWELL
Vistula Trail Motel 2 Sty. Fr. (New)
HOWE (Uninc) Pop. 540±
STRUCTURE NO. 102 12" B.C.C.M. Pipe See Sheet No. 29
STRUCTURE NO. 103 15" Class I Pipe See Sheet No. 29
MARY H. DOWNS
(Vacant Lot)
PT 299+93.8 IPF
PC 302+35.6 IPF
STATE ROAD 91 (Blk. Top) N 1° 02' E
S.R. 9
Line E
CITIES SERVICE
HOWE UNINC. Pop. 540±
(Vacant Lot)
JAMES & KATIE E. KLINE
For Details of Deceleration Lane Taper Sta. 291+64 to 292+84 See Sheet No. 27
METROPOLITAN LIFE INS. CO.
Service Station
TRUSTEES OF HOWE MILITARY SCHOOL
JOHN & DORIS KENNEDY
RALPH STRUMBAUGH
ENTERPRISE LAND CORP.
Service Station No. 1
Service Station No. 2
No. 3
STRUCTURE NO. 83 Manhole See Sheet No. 27
STRUCTURE NO. 84 12" R.C., V.C., C.I., or Conc. Pipe Req'd See Sheet No. 27
STRUCTURE NO. 85 Catch Basin See Sheet No. 27
STRUCTURE NO. 86 Manhole See Sheet No. 27
STRUCTURE NO. 87 Manhole Catch Basin See Sheet No. 27
STRUCTURE NO. 89 Manhole See Sheet No. 28
STRUCTURE NO. 30 Manhole See Sheet No. 28
STRUCTURE NO. 91 Inlet See Sheet No. 28
STRUCTURE NO. 92 12" R.C., V.C., C.I., or Conc. See Sheet No. 28
STRUCTURE NO. 93 Manhole See Sheet No. 28
STRUCTURE NO. 95 Inlet See Sheet No. 28
STRUCTURE NO. 97 12" R.C., V.C., C.I., or Conc. Pipe Req'd See Sheet No. 28
STRUCTURE NO. 99 Inlet See Sheet No. 28
STRUCTURE NO. 94 ~~Manhole~~ Inlet See Sheet No. 28
STRUCTURE NO. 96 12" B.C.C.M. Pipe Req'd See Sheet No. 28
STRUCTURE NO. 104 15" Class I Pipe See Sheet No. 30
STRUCTURE NO. 105 12" Class I Pipe Req'd See Sheet No. 30
FOR DETAILS AND STRUCTURE NOTES SEE SHEETS 27, 28, 29, 30
Sta. 290+00 to 305+00 Salvaged Road Material 500 c.y.
ALL R/W ON THIS SHEET IS 50' EACH SIDE OF ℄ EXCEPT AS SHOWN
P.C. 289+93.8 I.P.L.
PI 294+93.8 I.P.F.
PT. 299+93.8 I.P.F.
P.C. 302+35.6 I.P.F.
B.M. #27 Elev. 862.29 Bt. spk. in 24" Elm. 144' Lt. sta. 280+27
B.M. #28 Elev. 861.04 Bt. spk. in 28" Elm 60' Rt. sta. 287+89
B.M. #29 Elev. 879.25 □ cut in S.W. cor. gas. sta. w/h. 83' Rt. sta. 295+87
B.M. #30 Elev. 882.32 □ cut in S.W. cor. flag base 68' Rt. sta. 308+35
Guide Posts Type "A" Rt. & Lt. (See Preceding Sheet)
+00 EL. 877.42 V.C. = 400'
+00 EL. 875.98 V.C. = 400'
100 s.y. of Sodding Req'd. (For Sodded Ditch on Rt.)
For Sodding on Lt. See Following Sheet
For Sodding on Rt. See Following Sheet
448 S.Y. of Sodding Req'd on Lt.
-0.880%
-0.240%
-0.750%
+0.30%
+1.00%
+2.20%
+0.033%
-0.168%
+0.707%
+50 El. 873.40
+50 El. 874.0
El. 875.15
El. 875.00
+85 El. 872.15
+00 El. 872.0
+00 El. 874.30 Rt.
+45 El. 870.00
+00 El. 863.0
El. 865.2
Grade of Special 3' Bottom Ditch Rt.
Grade of Special 3' Bottom Ditch Lt.
Grade of Special 3' Bottom Ditch on Lt.
Grade of Special 3' Bottom Ditch on Rt.
Grade of Subsurface Tile Drain on Right Plotted 10' Below Datum
+00 El. 871.36
+00 El. 873.68
+85 El. 872.53
(130 Lft. Paved Side Ditch Type "A" Req'd on Rt.)
BALANCE NO. 14
CUT 4,206 c.y. 5,500 c.y. 9,706 c.y.
FILL +25% 12,768 c.y.
BORROW 8,868 c.y.
*PEAT EXCAVATION 670 cy
PEAT BACKFILL +5% 568 cy
*Note: Includes 366 cy. of Unsuitable Material to be Used in Shoulder Fill.
Rev. 9-15-59
8195 cy ~~8178 cy~~ of Above Borrow to be Obtained From Balance No. 15
580 cy ~~440~~ c.y. of Above Borrow to be Obtained From Balance No. 16
Above Borrow to be Obtained From Balance No. 15
880
870
860
9
290
1
2
3
4
295
6
7
8
9
300
1
2
3
4
305
Revised 5-26-59
F-578(1) "E" 16



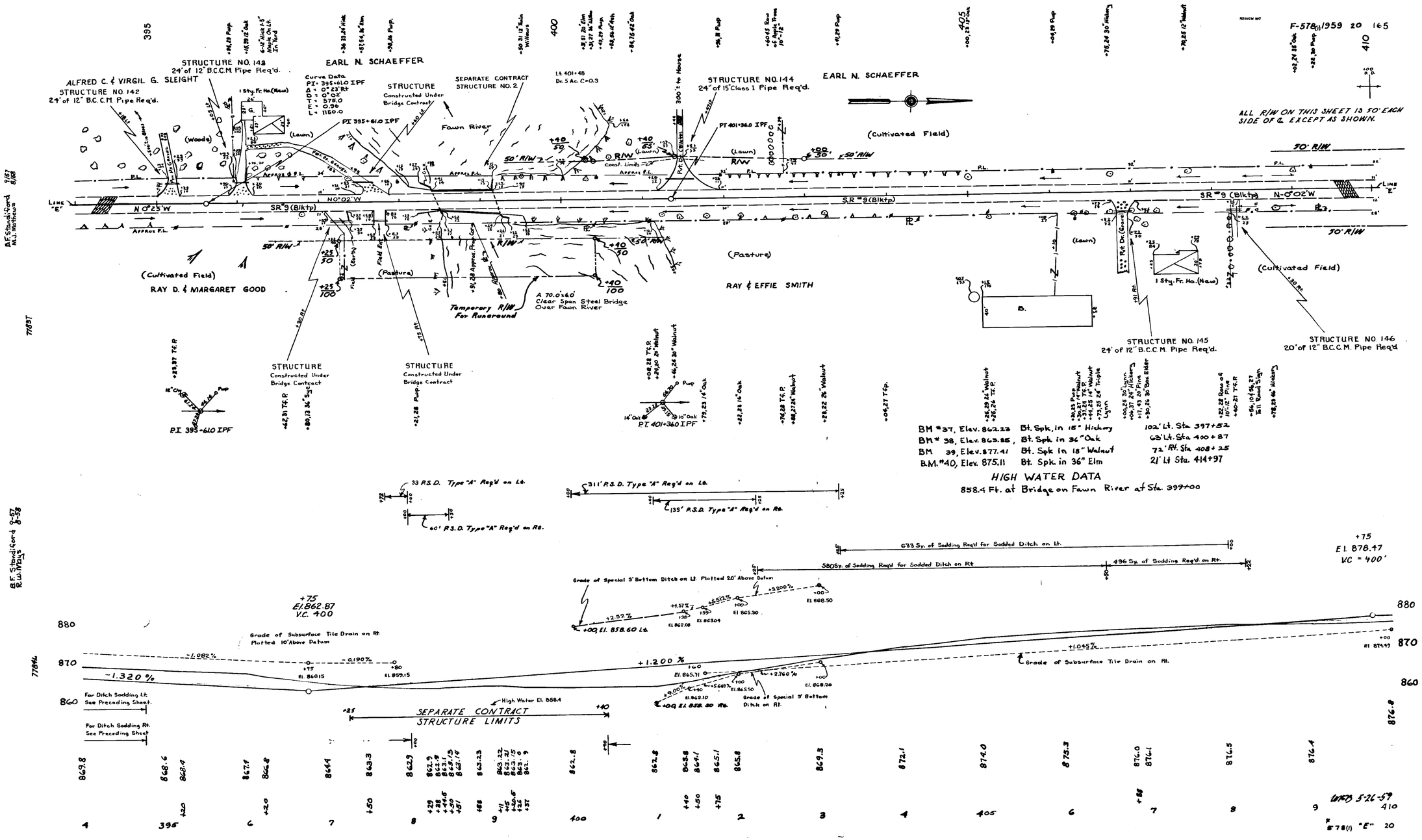
STRUCTURE NO. 103
18" Pipe Class I
See Sheet No. 30
STRUCTURE NO. 107
12" Bit. Coated CM Pipe Req'd.
See Sheet No. 30
STRUCTURE NO. 109
12" B.C.C.M. Pipe Req'd.
See Sheet No. 30
STRUCTURE NO. 111
12" B.C.C.M. Pipe Req'd.
See Sheet No. 30
STRUCTURE NO. 114
10" Sewer Pipe Req'd.
See Sheet No. 30
STRUCTURE NO. 117
10" Sewer Pipe Req'd.
See Sheet No. 31
STRUCTURE NO. 120
10" Sewer Pipe Req'd.
See Sheet No. 32
STRUCTURE NO. 123
10" Sewer Pipe Req'd.
See Sheet No. 32
STRUCTURE NO. 126
10" Sewer Pipe
See Sheet No. 33
STRUCTURE NO. 128
12" B.C.C.M. Pipe Req'd.
See Sheet No. 33
STRUCTURE NO. 129
15" Class I Pipe Req'd.
See Sheet No. 33
STRUCTURE NO. 130
15" Class I Pipe Req'd.
See Sheet No. 33
NUZUM, HELEN S.
(Cultivated Field)
SELL, ROBERT J. & MARY JANE
(Cultivated Field)
TRUSTEES OF HOWE MILITARY SCHOOL
STRUCTURE NO. 104
15" Class I Pipe Req'd.
See Detail Sheet No. 30
STRUCTURE NO. 105
12" Class I Pipe Req'd.
See Sheet No. 30
STRUCTURE NO. 106
12" B.C.C.M. Pipe Req'd.
See Sheet No. 30
STRUCTURE NO. 110
12" B.C.C.M. Pipe Req'd.
See Sheet No. 30
STRUCTURE NO. 112
Manhole
See Sheet No. 30
STRUCTURE NO. 113
Inlet
See Sheet No. 30
STRUCTURE NO. 115
Manhole
See Sheet No. 31
STRUCTURE NO. 116
Manhole
See Sheet No. 31
STRUCTURE NO. 118
Inlet
See Sheet No. 31
STRUCTURE NO. 119
Manhole
See Sheet No. 31
STRUCTURE NO. 121
Inlet
See Sheet No. 32
STRUCTURE NO. 122
Manhole
See Sheet No. 32
STRUCTURE NO. 124
Inlet
See Sheet No. 32
STRUCTURE NO. 125
Manhole
See Sheet No. 32
STRUCTURE NO. 127
Inlet
See Sheet No. 33
TRUSTEES OF HOWE MILITARY SCHOOL
NUZUM, RUSSEL K. JR. & HELEN
FOR DETAIL AND STRUCTURE NOTES
SEE SHEETS NO 30 to 33
ALL R/W ON THIS SHEET IS 50' EACH SIDE OF ℄ EXCEPT AS SHOWN.
B.M. #30 Elev. 882.32 □ cut in S.W. cor. flag base 68' Rt. sta. 308+35
B.M. #31 Elev. 882.27 □ cut in "White Hall" S.W. cor. step 67' Rt. sta. 321+19
BALANCE NO. 15
Cut 11,242 c.y.
Fill +25% 3,047 c.y.
Overhaul 8,195 c.y.
Above Overhaul to be Disposed of in Balance No. 14
+50
El. 879.99
V.C. 400'
+00
El. 881.04
V.C. 400'
+00
El. 880.84
V.C. 400'
BALANCE NO 16
Cut 4,218 c.y.
Fill +25% 2,382 c.y.
Overhaul 1,836 c.y.
Added Haul 580 units
580 c.y. of The Above Overhaul to be Disposed of in Balance No. 14
1256 c.y. of The Above Overhaul to be Disposed of in Balance No. 17
+00
El. 883.24
V.C. 400'
Grade of Subsurface Tile Drain on Rt. Plotted 20' Above Datum
Grade of Gutter Rt. Plotted 10' Above Datum
Grade of 3' Bottom Ditch Rt. Plotted 10' Below Datum
Grade of 3' Bottom Ditch Rt. Plotted 10' Below Datum
1923 Sy. of Sodding Req'd on Rt.
890
880
870

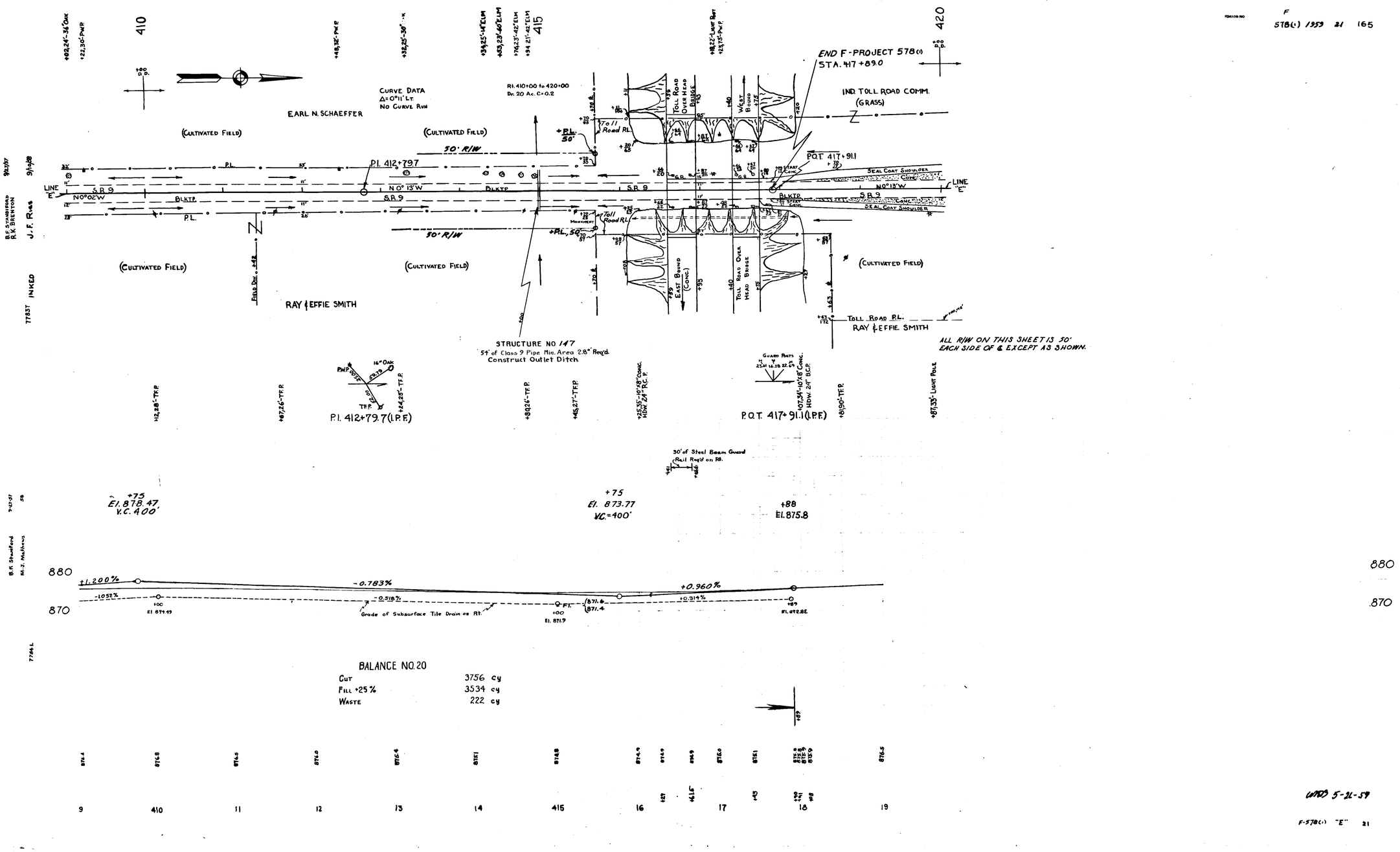


IND. F-578 (1) 1959 18 165
ROBERT J. & MARYJANE SELL
Cultivated Field
THAD. K. & EMILY HALL
Pasture
Russel K. & Helen Nuzum Jr.
Pasture
Cultivated Field
THAD K. & EMILY HALL
EMMA S. KLOPFENSTEIN
Clover
Clover
STRUCTURE NO. 131
20' of 12" of B.C.C.M. Pipe Req'd.
STRUCTURE NO. 132
24' of 12" B.C.C.M. Pipe Req'd
STRUCTURE NO. 133
20' of 12" B.C.C.M. Pipe Req'd.
STRUCTURE NO. 134
24' of 12" B.C.C.M. Pipe Req'd.
STRUCTURE NO. 135
22' of 12" Class I Pipe Req'd.
CURVE DATA
Δ = 0°44' LT.
D = 0°04.4'
T = 500.0'
L = 1000'
E = 1.60'
500' Lt. To Pond (No Outlet)
Rt. 331 to 359+50
Dr. 3 Ac. C=0.2
Rt. 346+80 Lt. 346.75
Dr. 2 Ac. C=0.2
P.I. 352+09.31 I.P.F.
P.T. 357+09.3
P.C. 347+09.3 I.P.F.
P.I. 352+09.3 (I.P.F.)
P.T. 357+09.3 I.P.F.
R.O.T. 338+17.6 (I.P.F.)
50' R/W
N. 0° 10' E
N. 0° 34' W
Line E
Approx
Field Div.
Field Ent. (Earth)
ALL R/W ON THIS SHEET IS 50' EACH SIDE OF ℄
B.M. NO. 32, Elev. 879.52, Bt. Spk. In 22" Box Elder, 91 Lt. Sta. 347+70
B.M. NO. 33, Elev. 878.04, Bt. Spk. In 36" Cotton Wood, 75' Rt. Sta. 368+13
Grade of Subsurface Tile Drain on Rt. Plotted 30' Above Datum
Grade of Special 3' Bottom Ditch on Lt. Plotted 20' Above Datum
Grade of Special 3' Bottom Ditch on Rt.
+00
El. 883.24
V.C. = 400'
+00
El. 879.64
V.C. = 400'
+00
El. 878.35
V.C. = 1000'
BALANCE No. 17
Cut 1,347 Cy.
Fill +25% 3,021 Cy.
Borrow 1,674 Cy.
1256 cy. of Above Borrow to be Obtained from Balance No. 16
418 cy. of Above Borrow to be Obtained from Balance No 19

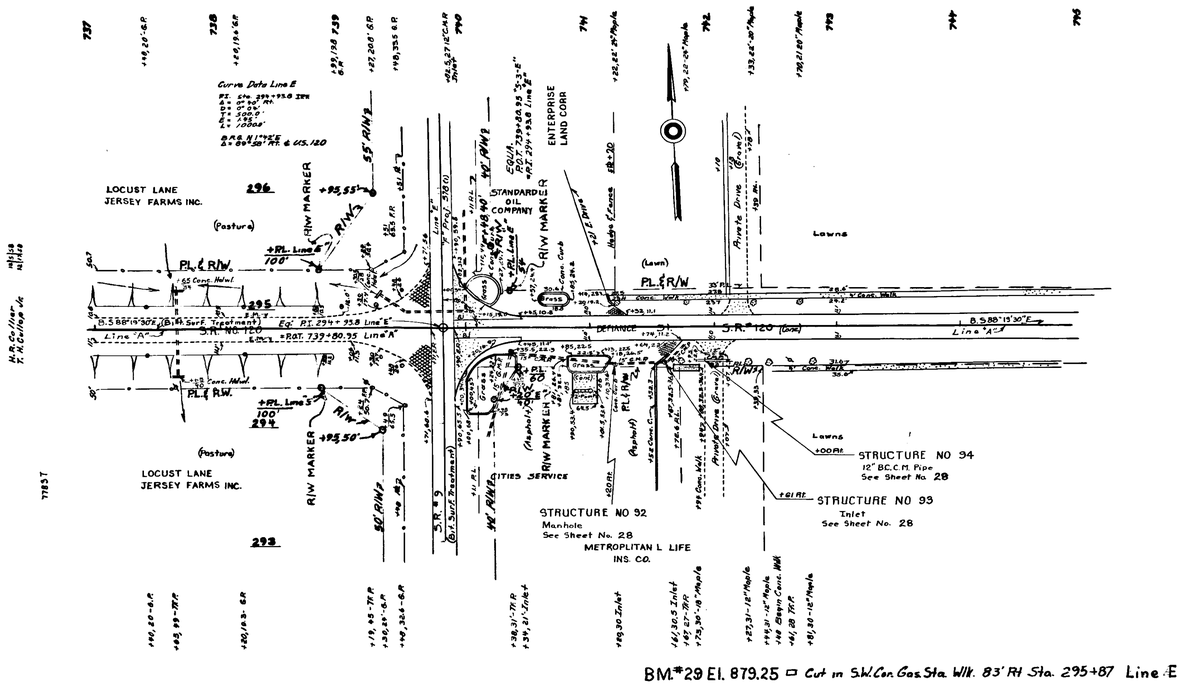


THAD K. & EMILY HALL
(Cultivated Field)
Lt. 365+95 Dr. from 331+00 Dr. 4 Ac. C=0.2
Rt. 367+72 Dr. 9 Ac. C=0.2
STRUCTURE NO. 136
20' of 12" Class I Pipe Req'd.
P.O.T. 366+00.3
EARL N. & ELMA SCHAEFFER
(Cultivated Field)
STRUCTURE NO. 139
68' of 24" Class I Pipe Req'd.
Construct Outlet Ditch
Sec. 24
T38N R9E
Rt. 331+00 to 383+00 Dr. 29 Ac. C=0.2
Sec. 13
T38N R9E
STRUCTURE NO. 140
24' of 12" B.C.C.M. Pipe Req'd.
RAY D. & MARGARET GOOD
(Cultivated Field)
ALFRED C. & VIRGIL G. SLEIGHT
P.O.T. 387+55.8
Line "E"
Sec. 19
T38N R10E
Sec. 18
T38N R10E
GULF OIL CO.
Curve Data
Δ=0°09' Rt.
(No Curve Run)
Type "B" Road Approaches Req'd Left and Right Sta. 378+48.0
EMMA S. KLOPFENSTEIN
STRUCTURE NO. 137
24' of 12" Class I Pipe Req'd.
STRUCTURE NO. 138
22' of 12" Class I Pipe Req'd.
STRUCTURE NO. 141
20' of 12" B.C.C.M. Pipe Req'd.
RAY D. & MARGARET GOOD
Curve Data
Δ=0°23' Rt.
D=0°02'
T=575.0'
L=1150.0'
E=0.96'
ALL R/W ON THIS SHEET IS 70' EACH SIDE OF ℄ EXCEPT AS SHOWN
P.O.T. 366+00.3 (IPF)
P.I. 378+48.0 (IPF)
P.O.T. 387+55.8 (IPF)
P.C. 389+86.0 (IPF)
BM. NO. 33, Elev. 878.04, Bt. Spk. In 36" Cottonwood 75' Rt. Sta. 368+13
BM. NO. 34, Elev. 875.71, Bt. Spk. In 8" Oak, 70' Rt. Sta. 378+18
BM. NO. 35, Elev. 879.14, Bt. Spk. In 26" Hickory 22' Lt. Sta. 382+50
BM. NO. 36, Elev. 876.45, Bt. Spk. In 26" Elm. 55' Rt. Sta. 383+76
BM. No. 37, Elev. 862.23, Bt. Spk. In 15" Hickory 102', Lt. Sta. 397+52
BALANCE NO. 19
Cut 9,735 c.y.
Fill +25% 2,579 c.y.
Overhaul 7,156 c.y.
Added haul 418 units
418 c.y. of Above Overhaul to be Disposed of in Balance No. 17
6738 c.y. of Above Overhaul to be Disposed of in Balance No. 18
+75
El. 880.00
V.C. = 500'
Grade of Special 9' Bottom Ditch on Lt. Plotted 20' Above Datum
Grade of Special 9' Bottom Ditch on Rt.
Grade of Subsurface Tile Drain on Rt. Plotted 10' Below Datum
BALANCE NO. 18
Cut 5,008 c.y.
Fill +25% 11,746 c.y.
Borrow 6738 c.y. ~~738 c.y.~~
Above Borrow to be Obtained From Balance No. 19
1205 S.Y. of Sodding Req'd for Sodded Ditch on Left
1237 S.Y. of Sodding Req'd for Sodded Ditch on Right

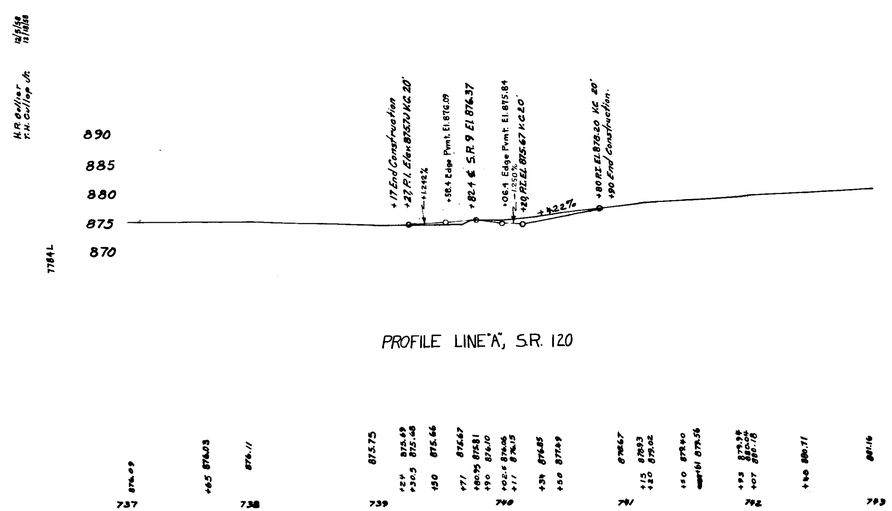

F-578(1) 1959 20 165
ALL R/W ON THIS SHEET IS 50' EACH SIDE OF ℄ EXCEPT AS SHOWN.
ALFRED C. & VIRGIL G. SLEIGHT
STRUCTURE NO. 142
24' of 12" B.C.C.M. Pipe Req'd.
STRUCTURE NO. 143
24' of 12" B.C.C.M. Pipe Req'd.
EARL N. SCHAEFFER
Curve Data
PI = 395+61.0 IPF
Δ = 0°23' Rt
D = 0°02'
T = 575.0
E = 0.96
L = 1150.0
STRUCTURE
Constructed Under Bridge Contract
SEPARATE CONTRACT STRUCTURE NO. 2
Fawn River
PI 395+61.0 IPF
Lt. 401+48
Dr. 5 Ac. C=0.3
300' to House
STRUCTURE NO. 144
24' of 15" Class 1 Pipe Req'd.
PT 401+36.0 IPF
EARL N. SCHAEFFER
(Cultivated Field)
(Woods)
(Lawn)
(Pasture)
(Cultivated Field)
RAY D. & MARGARET GOOD
RAY & EFFIE SMITH
A 70'x6.0' Clear Span Steel Bridge Over Fawn River
Temporary R/W For Runaround
STRUCTURE NO. 145
24' of 12" B.C.C.M. Pipe Req'd.
STRUCTURE NO. 146
20' of 12" B.C.C.M. Pipe Req'd
P.I. 395+61.0 IPF
P.T. 401+36.0 IPF
BM #37, Elev. 862.23 Bt. Spk. in 15" Hickory
BM # 38, Elev. 863.85, Bt. Spk in 36" Oak
BM 39, Elev. 877.41 Bt. Spk in 18" Walnut
B.M. #40, Elev. 875.11 Bt. Spk. in 36" Elm
102' Lt. Sta. 397+52
63' Lt. Sta. 400+87
72' Rt. Sta. 408+25
21' Lt Sta. 414+97
HIGH WATER DATA
858.4 Ft. at Bridge on Fawn River at Sta. 399+00
33 P.S.D. Type "A" Req'd on Lt.
60' P.S.D. Type "A" Req'd on Rt.
311' P.S.D. Type "A" Req'd on Lt.
135' P.S.D. Type "A" Req'd on Rt.
633 Sy. of Sodding Req'd for Sodded Ditch on Lt.
580 Sy. of Sodding Req'd for Sodded Ditch on Rt
496 Sy. of Sodding Req'd. on Rt.
Grade of Special 3' Bottom Ditch on Lt. Plotted 20' Above Datum
+75
El. 878.47
VC = 400'
+75
El. 862.87
VC. 400
Grade of Subsurface Tile Drain on Rt. Plotted 10' Above Datum
-1.082%
-0.190%
-1.320 %
+1.200 %
+1.045%
+2.760 %
+3.200%
+2.327%
+4.517%
+5.512%
+3.00%
+5.687%
Grade of Subsurface Tile Drain on Rt.
Grade of Special 3' Bottom Ditch on Rt.
High Water El. 858.4
SEPARATE CONTRACT STRUCTURE LIMITS
For Ditch Sodding Lt. See Preceding Sheet.
For Ditch Sodding Rt. See Preceding Sheet
B.F. Standiford 9-57 R.W. Mills 8-58
B.F. Standiford 9/57 R.W. Mills 8/58
WMS 5-26-59
F 578(1) "E" 20


410
415
420
CURVE DATA
Δ=0°11' LT.
NO CURVE RVN
EARL N. SCHAEFFER
(CULTIVATED FIELD)
(CULTIVATED FIELD)
50' R/W
P.I. 412+79.7
LINE "E"
S.R. 9
N0°02'W
N0°13'W
BLKTP.
P.L.
50' R/W
(CULTIVATED FIELD)
(CULTIVATED FIELD)
RAY & EFFIE SMITH
Rt. 410+00 to 420+00
Dr. 20 Ac. C=0.2
Toll Road R.L.
+P.L. 50'
TOLL ROAD OVER HEAD BRIDGE
WEST BOUND
END F-PROJECT 578(1)
STA. 417+89.0
IND. TOLL ROAD COMM.
(GRASS)
P.O.T. 417+91.1
SEAL COAT SHOULDER
CONC.
EAST BOUND (CONC.)
TOLL ROAD OVER HEAD BRIDGE
TOLL ROAD P.L.
RAY & EFFIE SMITH
STRUCTURE NO. 147
54' of Class 9 Pipe Min. Area 2.8" Req'd.
Construct Outlet Ditch
ALL R/W ON THIS SHEET IS 50'
EACH SIDE OF ℄ EXCEPT AS SHOWN.
P.I. 412+79.7 (I.P.F.)
P.O.T. 417+91.1 (I.P.F.)
30' of Steel Beam Guard Rail Req'd on Rt.
+75
El. 878.47
V.C. 400'
+75
El. 873.77
V.C.=400'
+88
El. 875.8
880
870
+1.200%
-0.783%
+0.960%
-1.052%
-0.518%
+0.314%
Grade of Subsurface Tile Drain on Rt.
BALANCE NO. 20
CUT 3756 cy
FILL +25% 3534 cy
WASTE 222 cy
9
410
11
12
13
14
415
16
17
18
19

WRD 5-21-59




BM.#29 El. 879.25 □ Cut in S.W. Con. Gas Sta. Wlk. 83' Rt Sta. 295+87 Line E



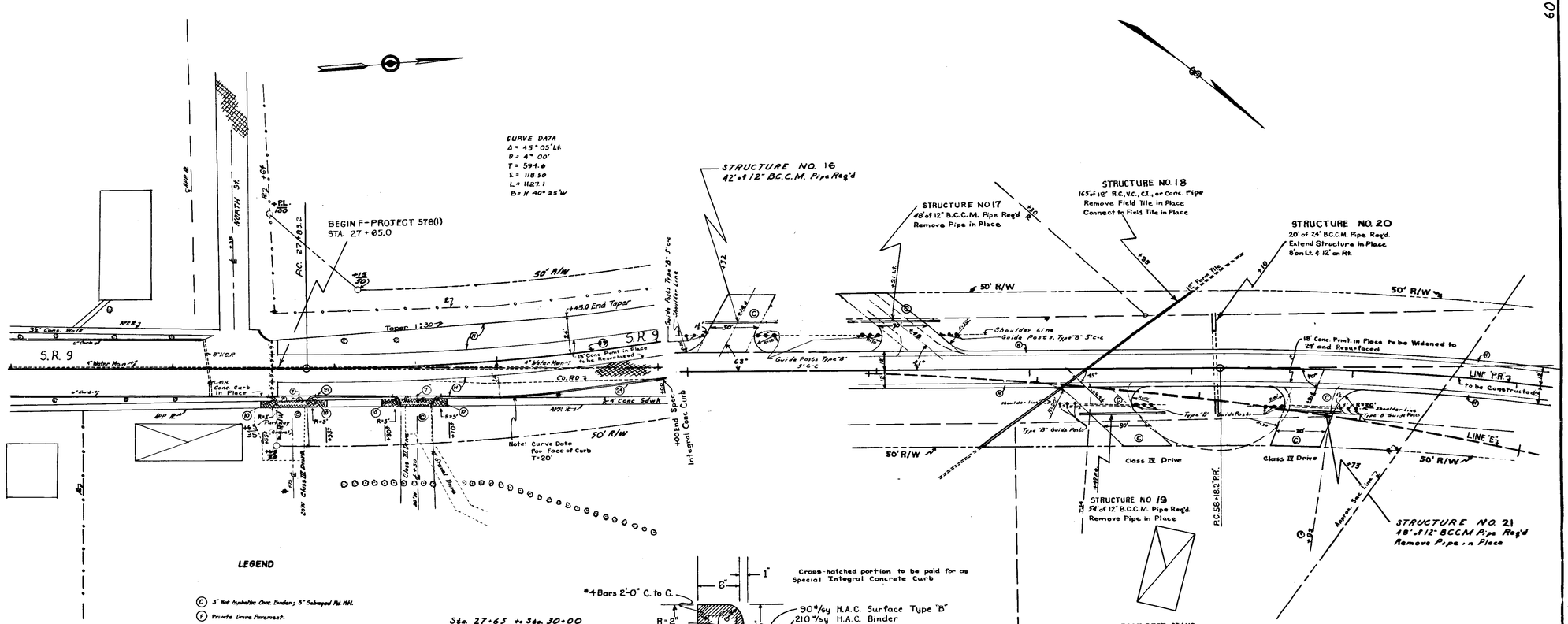

PROFILE LINE "A", S.R. 120

F
578(1) 1959 22 165

UNTS 5-26-59

F
578-(1) "S-3-E" 22

| FEDERAL ROAD REGION NO. | STATE | F PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(1) | 1959 | 23 | 165 |




## LEGEND

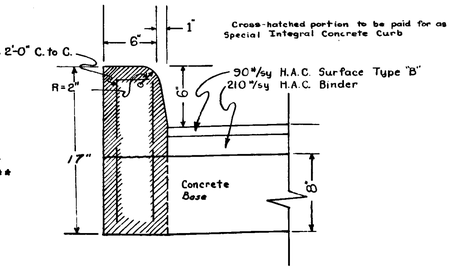
- (C) 3" Hot Asphaltic Conc. Binder; 5" Salvaged Rd. Mtl.
- (F) Private Drive Pavement.
- (G) Commercial Drive Pavement.
- (H) 90#/Sys. Hot Asphaltic Concrete Surface Type "B"; 210#/Sys. Hot Asphaltic Concrete Binder; 8" Concrete Base
- (3) Longitudinal Joint.
- (7) Keyway Joint.
- (10) ½" Preformed Joint Filler (Between Curb and Sidewalk)
- (24) Special Integral Concrete Curb
- (19) 6" Traffic Lane Strip.
- (21) Keway Construction Joint.
- Curb to be Removed.
- Sidewalk to be Removed.

COMMERCIAL DRIVES STA. 27+75 & STA. 28+50
Scale: 1" = 30'

Sta. 27+65 to Sta. 30+00
ADDITIONAL QUANTITIES

| | |
|---|---|
| Curb Removal | 5 L.F. |
| Walk Removal | 36 S.Y. |
| 8" Conc Base | 70 512 S.Y. |
| Hot Asphaltic Conc. Surface, Type "B" | 23.4 Tons |
| Hot Asphaltic Conc. Binder | 76.2 Tons* |
| Hot Asphaltic Conc. Base | 21.0 Tons** |
| Special Integral Conc. Curb | 180 L.F. |
| Cement Conc. Sidewalk | 24 S.Y. |
| Private Drive Pavement | 17 S.Y. |
| Commercial Drive Pavm't. | 17 S.Y. |
| Soln. Rd. Material | 4 C.Y. |
| ½" Preformed Joint Filler | 16 L.F. |

* Includes 3.7 Tons For Wedge & Leveling And 18 Tons For Approaches
** All For Wedge and Leveling




SPECIAL INTEGRAL CONCRETE CURB
Scale: 1" = 6"
Sta. 27+65 to 30+00

CURVE DATA
Δ = 41° 09' Rt.
D = 2° 30'
T = 264.4
L = 1646.0
E = 156.16

COMMERCIAL DRIVES STA. 54+14 to STA. 58+81
Scale: 1" = 30'

ADDITIONAL QUANTITIES

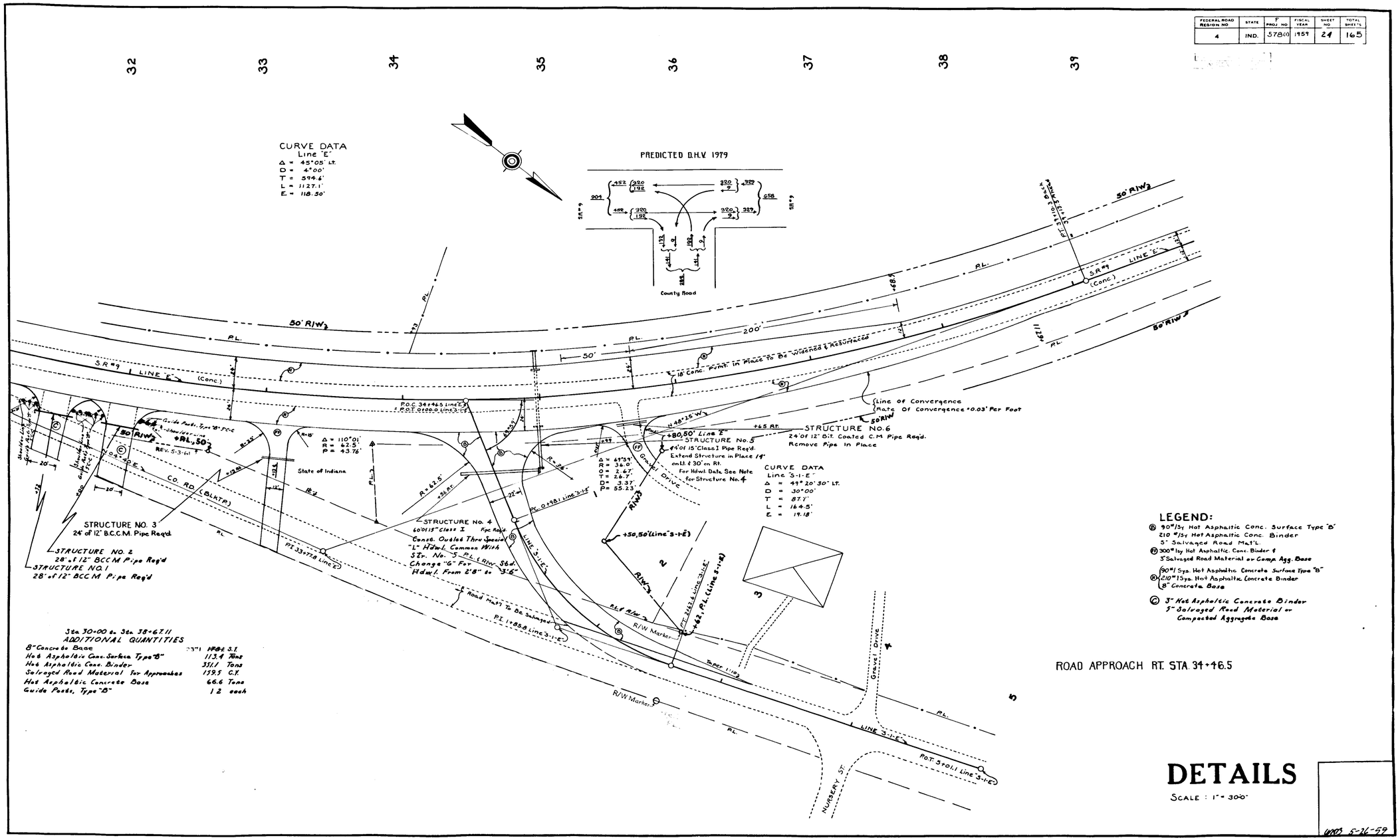
| | |
|---|---|
| Guide Posts, Type "B" | 24 each |
| Hot Asphaltic Conc. Binder | 102.9 Tons |
| Salvaged Road Material | 953 C.Y. |

# DETAILS

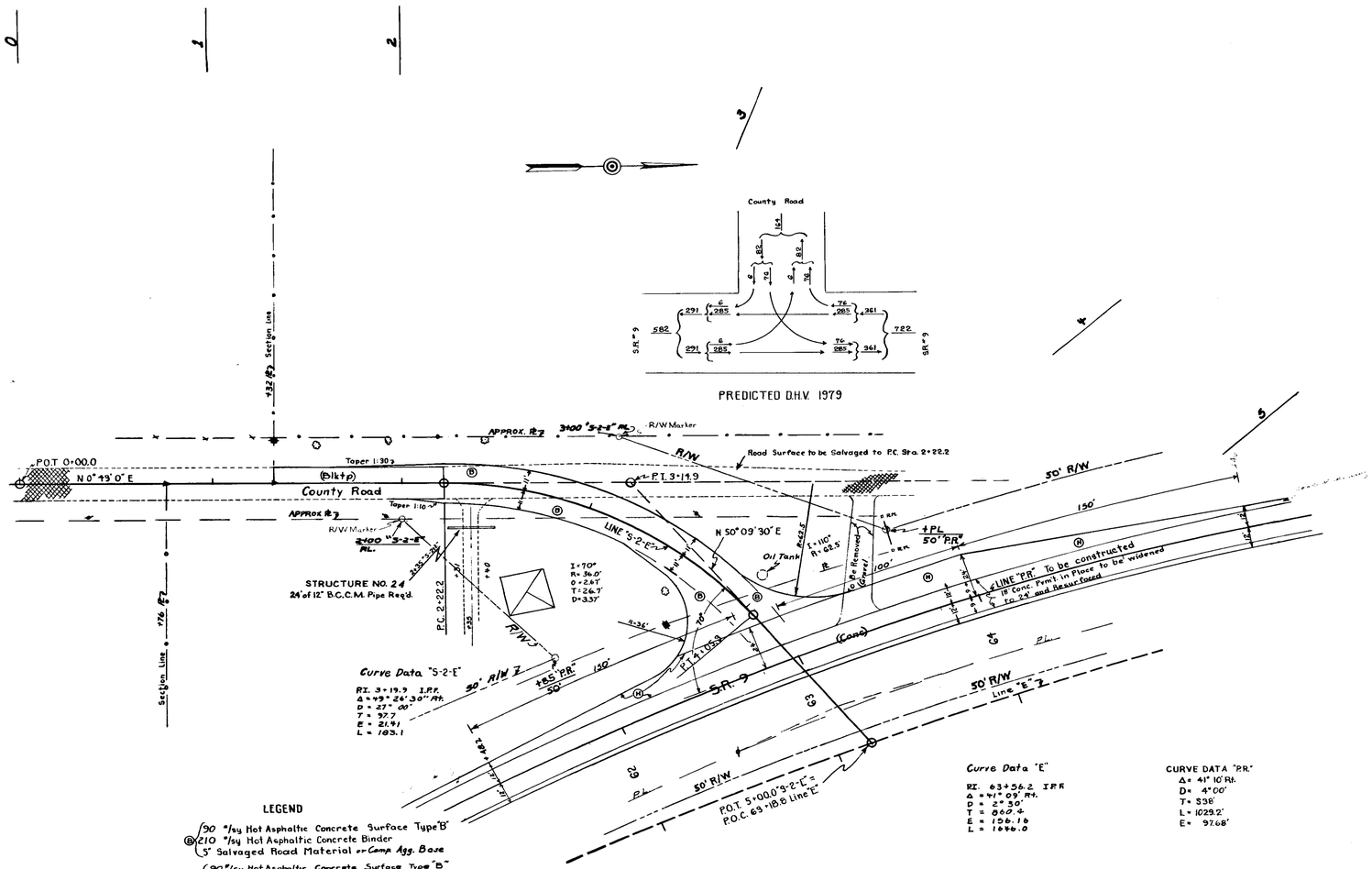
Scale: As Shown

WKM 5-26-59

| FEDERAL ROAD REGION NO. | STATE | F PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 5780 | 1959 | 24 | 165 |



| FEDERAL ROAD REGION NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578 | 1959 | 25 | 165 |




PUBLIC ROAD APPROACH LT. STA. 62+97.0

ADDITIONAL QUANTITIES

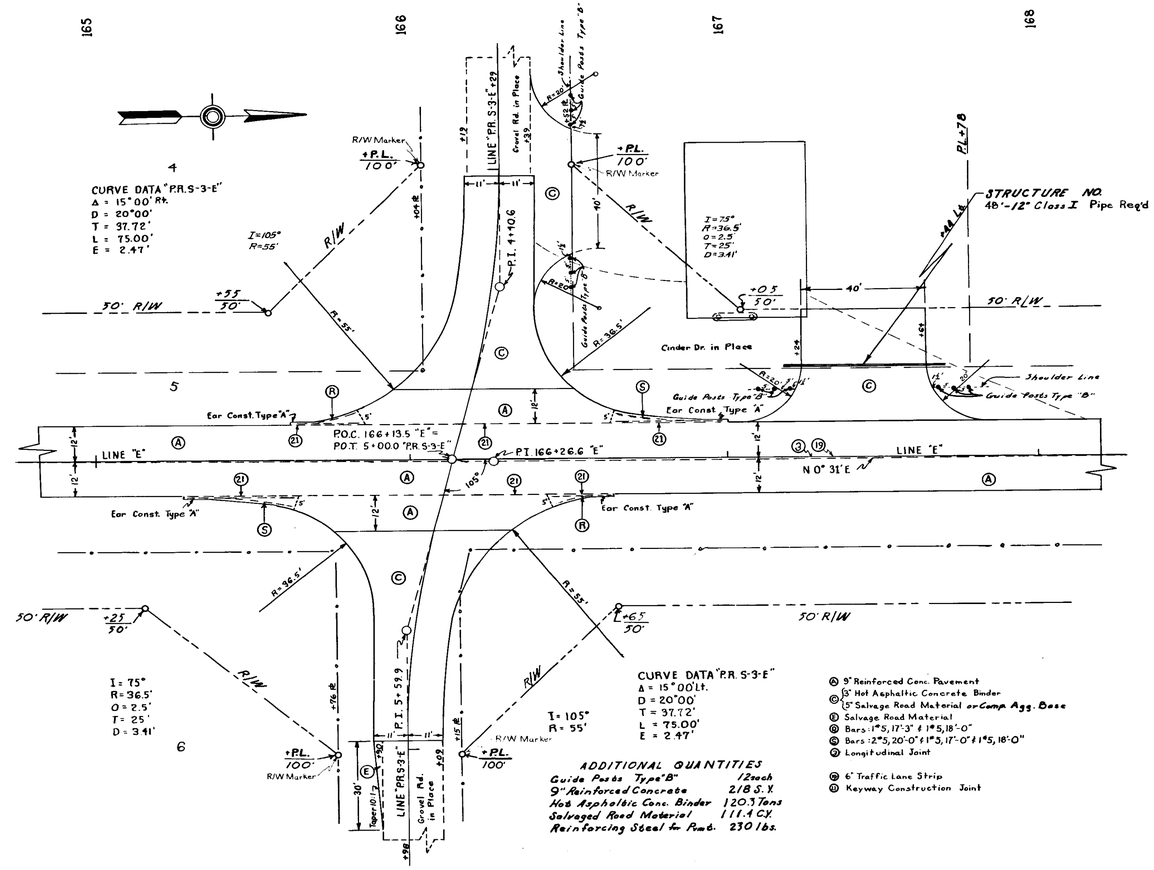
| | |
|---|---|
| Hot Asphaltic Conc. Surface, Type "B" | 46.3 Tons |
| Hot Asphaltic Conc. Binder | 119.8 Tons |
| Salvaged Road Material | 98 C.Y. |
| 8" Concrete Base | 506 |

# DETAILS

Scale 1" = 30'

WMT 5-26-59

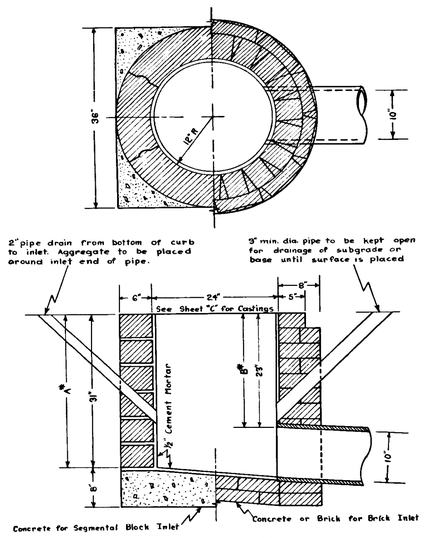
| FEDERAL ROAD REGION NO. | STATE | F PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | STB(1) | 1959 | 26 | 165 |




## DETAIL OF COUNTY ROAD APPROACHES AND COMMERCIAL DRIVES

SCALE: 1"=20'

STRUCTURE NO. 46'-12" Class I Pipe Req'd




* Note: In special cases dimension "B" may be reduced to 10" and dimension "A" may be reduced to 18"

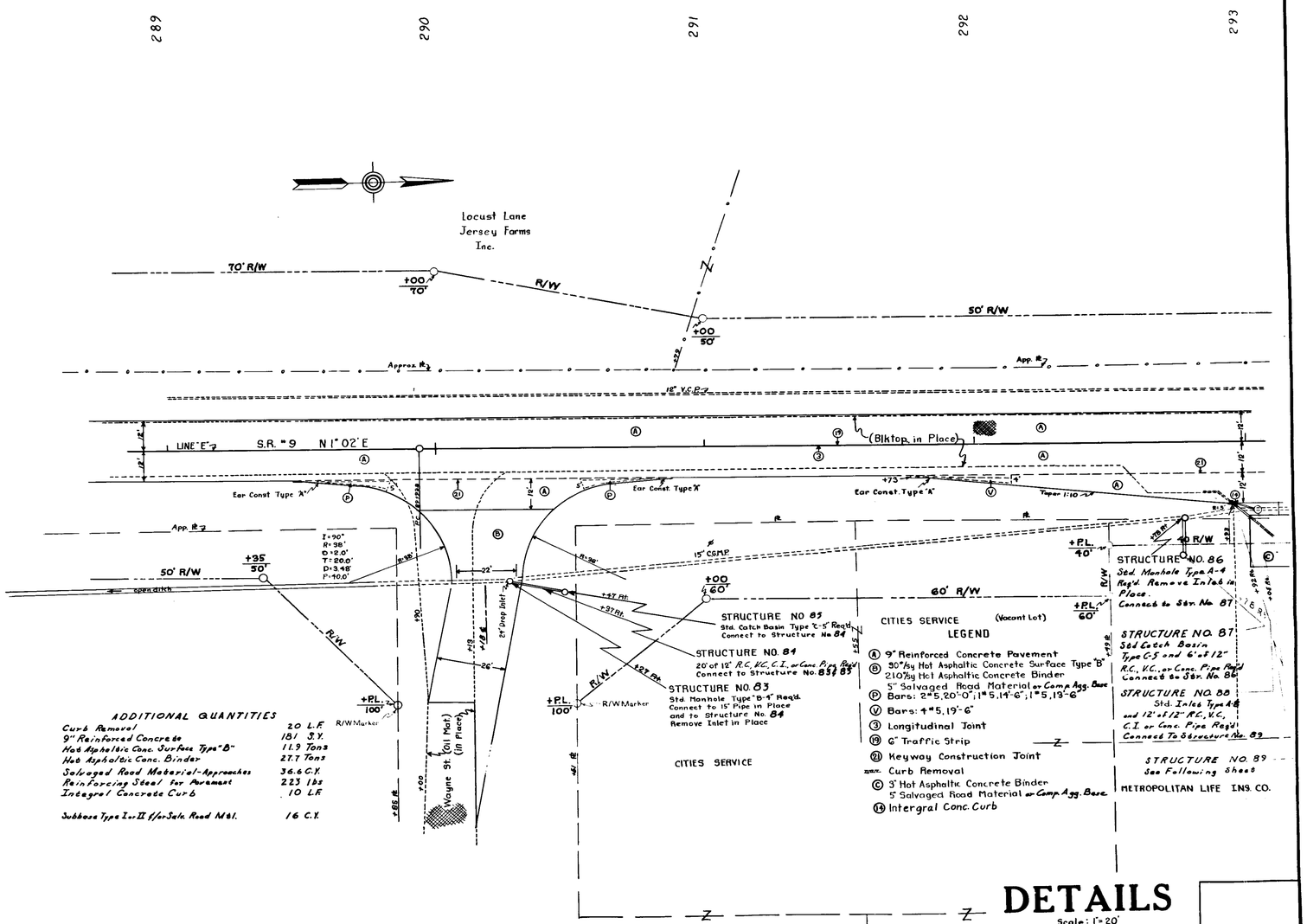
SPECIAL TYPE "A" INLET

Scale: 1"= 1'-0"

# DETAILS

WRD 5-26-59

| FEDERAL ROAD REGION NO. | STATE | F PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 57B(1) | 1959 | 27 | 165 |




## ADDITIONAL QUANTITIES

| | |
|---|---|
| Curb Removal | 20 L.F. |
| 9" Reinforced Concrete | 181 S.Y. |
| Hot Asphaltic Conc. Surface Type "B" | 11.9 Tons |
| Hot Asphaltic Conc. Binder | 27.7 Tons |
| Salvaged Road Material-Approaches | 36.6 C.Y. |
| Reinforcing Steel for Pavement | 223 lbs |
| Integral Concrete Curb | 10 L.F. |
| Subbase Type I or II f/ for Sale. Road No 81. | 16 C.Y. |

## LEGEND

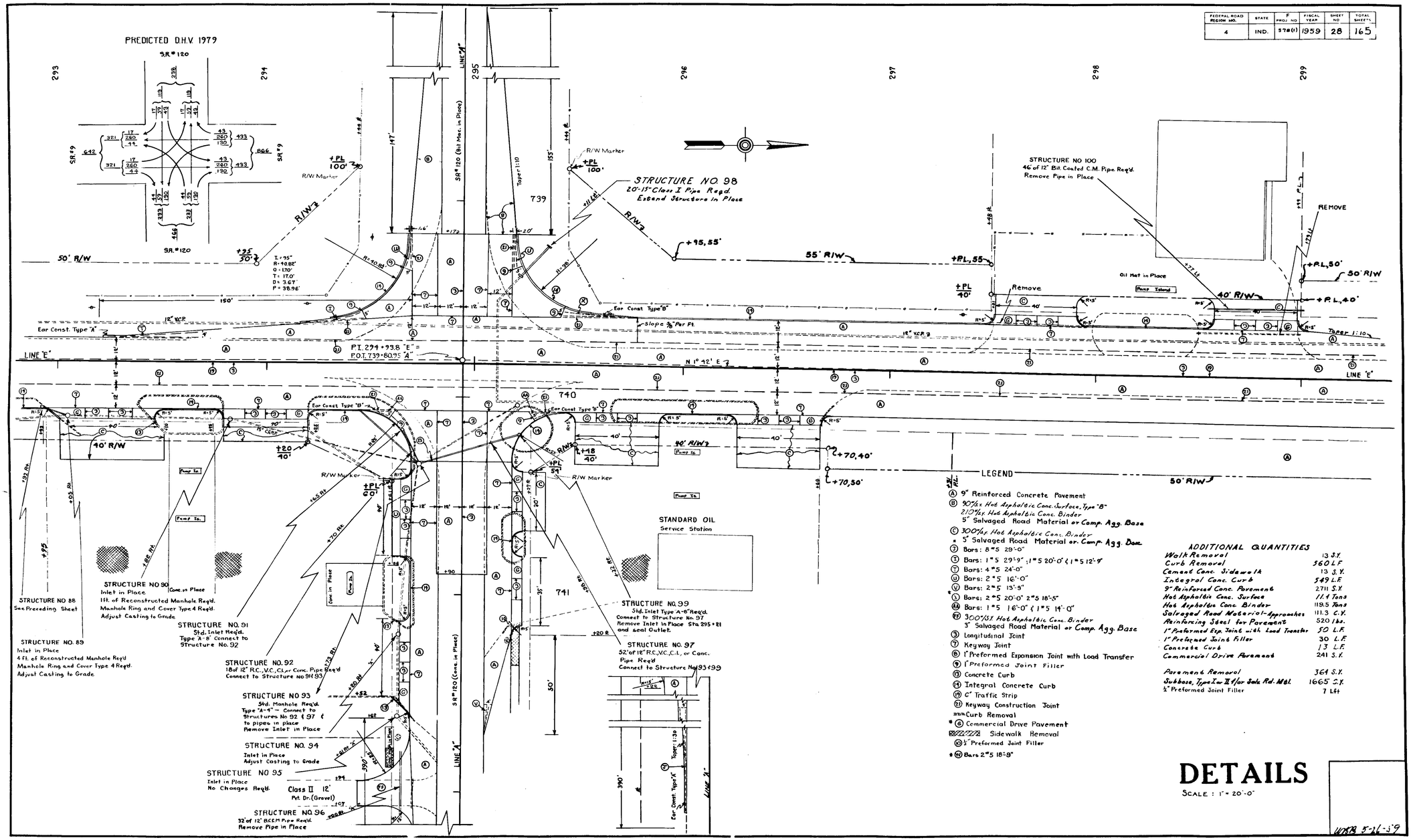
- (A) 9" Reinforced Concrete Pavement
- (B) 30 lbs/sy Hot Asphaltic Concrete Surface Type "B"
  210 lbs/sy Hot Asphaltic Concrete Binder
  5" Salvaged Road Material or Comp. Agg. Base
- (P) Bars: 2 #5, 20'-0"; 1 #5, 14'-6"; 1 #5, 13'-6"
- (V) Bars: 4 #5, 19'-6"
- (3) Longitudinal Joint
- (19) 6" Traffic Strip
- (21) Keyway Construction Joint
- Curb Removal
- (C) 3" Hot Asphaltic Concrete Binder
  5" Salvaged Road Material or Comp. Agg. Base
- (14) Intergral Conc. Curb

# DETAILS

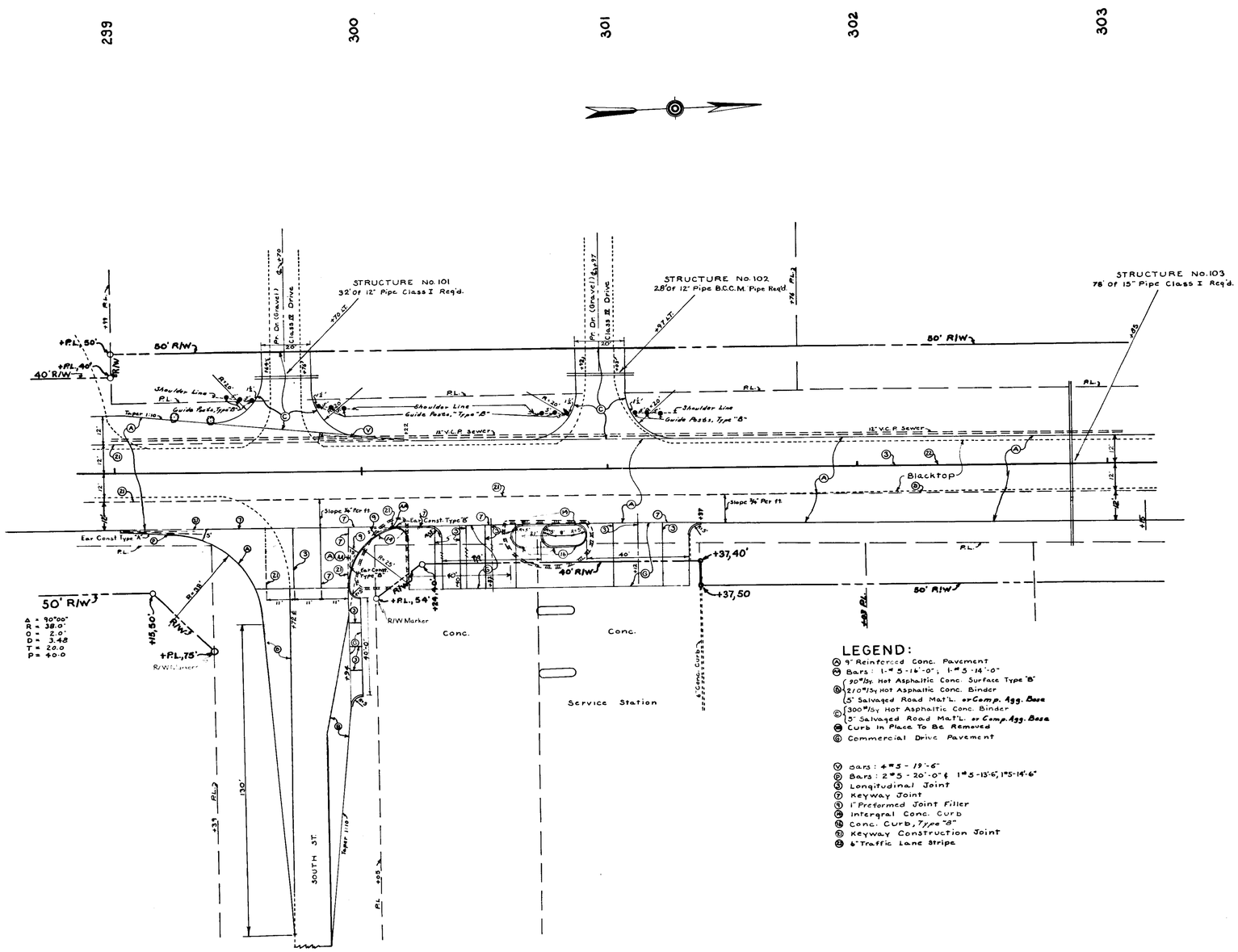
Scale: 1" = 20'

WRD 5-26-59

| FEDERAL ROAD REGION NO. | STATE | F PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(1) | 1959 | 28 | 165 |



| FEDERAL ROAD REGION NO. | STATE | F PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 378 (1) | 1959 | 29 | 165 |




## LEGEND:

- Ⓐ 9" Reinforced Conc. Pavement
- Ⓑ Bars: 1-#5-16'-0"; 1-#5-14'-0"
- Ⓒ 90#/Sy. Hot Asphaltic Conc. Surface Type "B" / 270#/Sy Hot Asphaltic Conc. Binder / 5" Salvaged Road Mat'L. or Comp. Agg. Base
- Ⓓ 300#/Sy Hot Asphaltic Conc. Binder / 3" Salvaged Road Mat'L. or Comp. Agg. Base
- Ⓔ Curb In Place To Be Removed
- Ⓕ Commercial Drive Pavement

- Ⓥ Bars: 4-#5 - 19'-6"
- Ⓓ Bars: 2-#5 - 20'-0" & 1-#5-13'-6", 1-#5-14'-6"
- ③ Longitudinal Joint
- ⑦ Keyway Joint
- ⑨ 1" Preformed Joint Filler
- ⑩ Integral Conc. Curb
- ⑭ Conc. Curb, Type "B"
- ㉑ Keyway Construction Joint
- ㉒ 6" Traffic Lane Stripe

## ADDITIONAL QUANTITIES

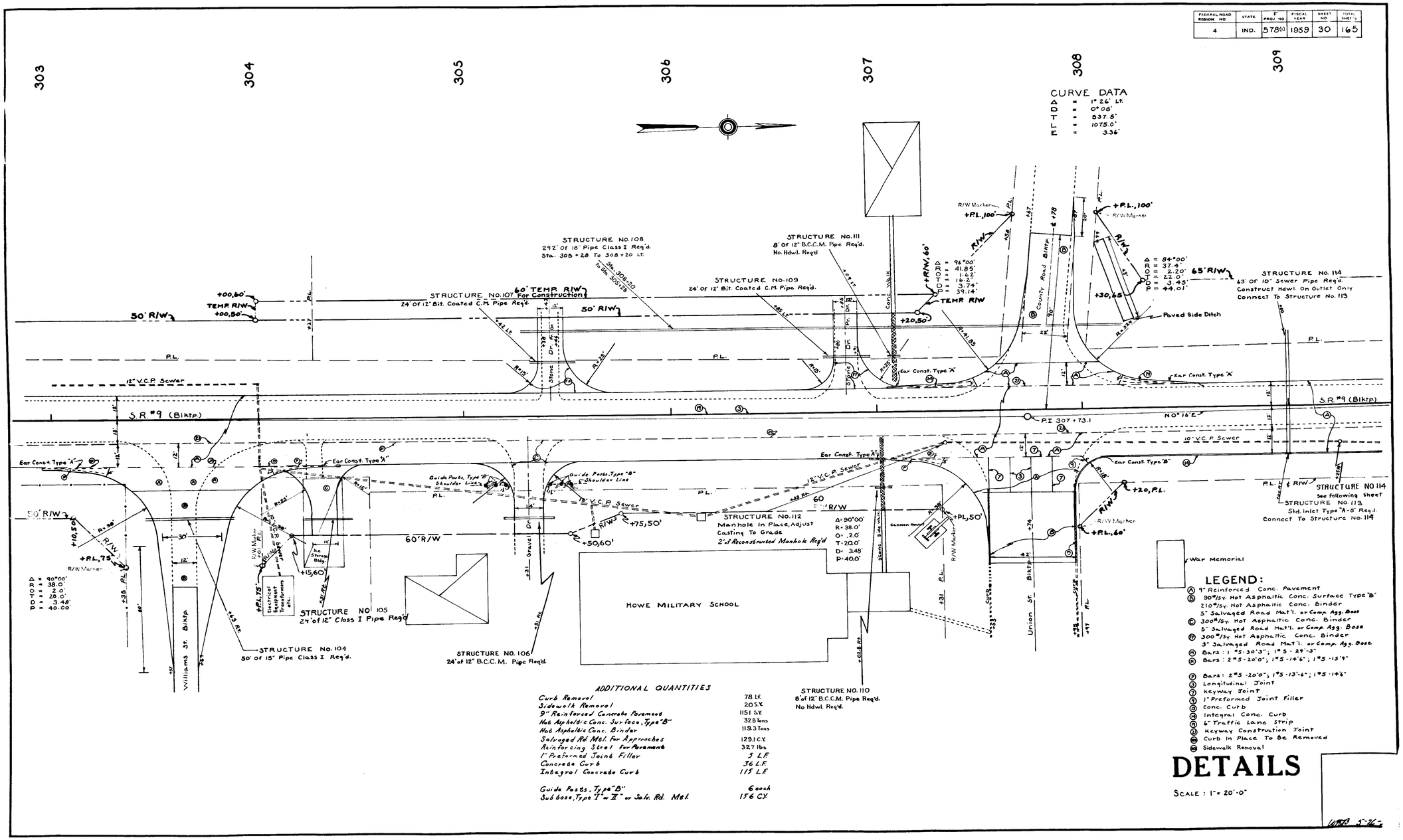
| | |
|---|---|
| Curb Removal | 186 Lf. |
| 9" Reinforced Conc. Pavement | 765 Sy. |
| Hot Asphaltic Conc. Surface Type "B" | 128 Tons |
| Hot Asphaltic Conc. Binder | 59.2 Tons |
| Salv. Road Mat. For Approaches | 64.6 Cy. |
| Commercial Drive Pavement | 425.5 Sy. |
| Reinforcing Steel for Pavement | 215.3 lbs. |
| 1" Preformed Joint Filler | 10 Lf. |
| Integral Conc. Curb | 57 Lf. |
| Conc. Curb Type "B" | 16 Lf. |
| Subbase Type "I" or "II" or Salv. Road Mat. | 116 Cy. |
| Guide Posts Type "B" | 12 Each |
| Pavement Removal | 274 Sy. |

# DETAILS

Scale: 1" = 20'-0"

WRD 5-21-175

| FEDERAL ROAD REGION NO | STATE | F PROJ NO | FISCAL YEAR | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(1) | 1959 | 30 | 165 |



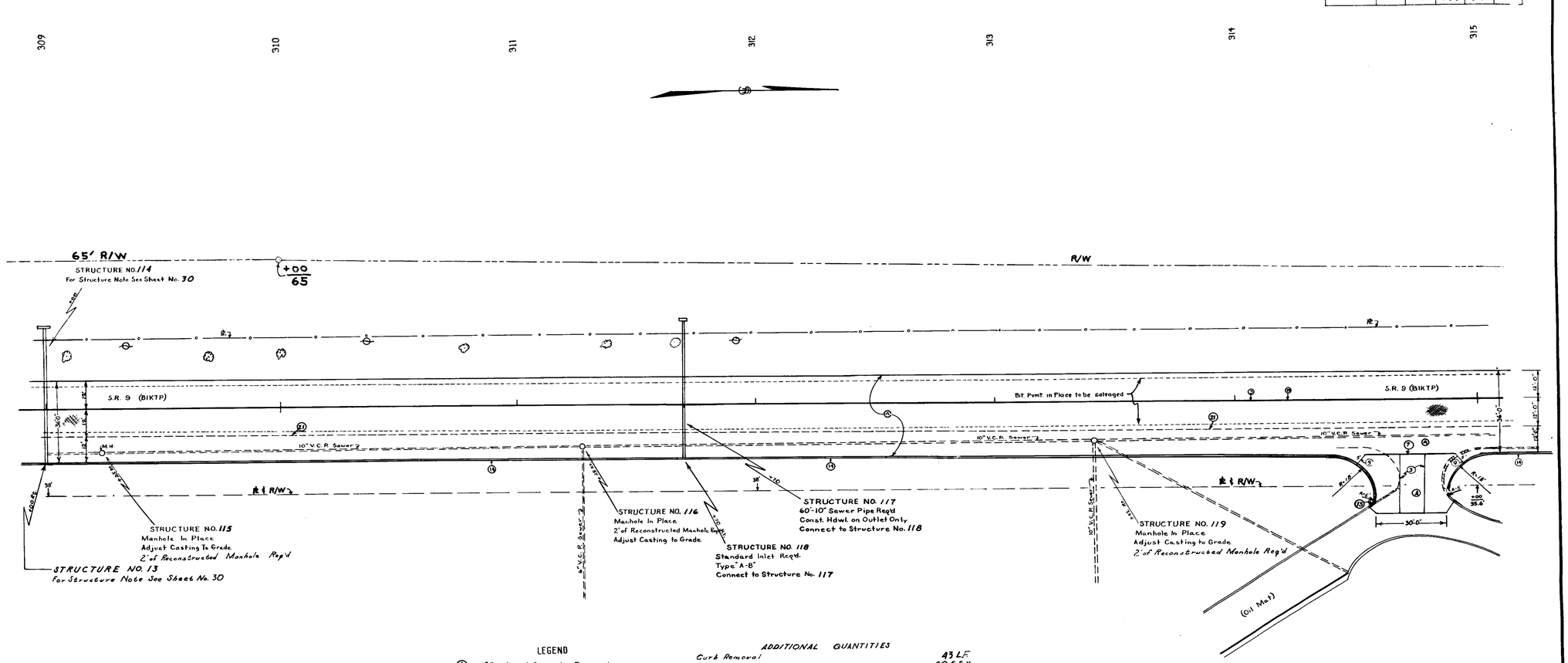

## ADDITIONAL QUANTITIES

| | |
|---|---|
| Curb Removal | 78 L.F. |
| Sidewalk Removal | 205 S.Y. |
| 9" Reinforced Concrete Pavement | 1151 S.Y. |
| Hot Asphaltic Conc. Surface, Type "B" | 32.8 Tons |
| Hot Asphaltic Conc. Binder | 113.3 Tons |
| Salvaged Rd. Mat'l. for Approaches | 129.1 C.Y. |
| Reinforcing Steel for Pavement | 32.7 lbs. |
| 1" Preformed Joint Filler | 5 L.F. |
| Concrete Curb | 36 L.F. |
| Integral Concrete Curb | 115 L.F. |
| Guide Posts, Type "B" | 6 each |
| Sub base, Type "I" or "II" or Sale. Rd. Mat'l. | 156 C.Y. |

# DETAILS

SCALE: 1" = 20'-0"

| FEDERAL ROAD REGION NO. | STATE | F PROJ NO | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578-01 | 1959 | 31 | 165 |




LEGEND

- (A) 9" Reinforced Concrete Pavement
- (D) Bars: 1"⌀ 13'-6" & 1"⌀ 13'-9"
- (3) Longitudinal Joint
- (7) Keyway Joint
- (9) 1" Preformed Joint Filler
- (13) Concrete Curb
- (14) Integral Concrete Curb
- (19) 6" Traffic Strip
- (21) Keyway Construction Joint
- Curb in Place to be removed

ADDITIONAL QUANTITIES

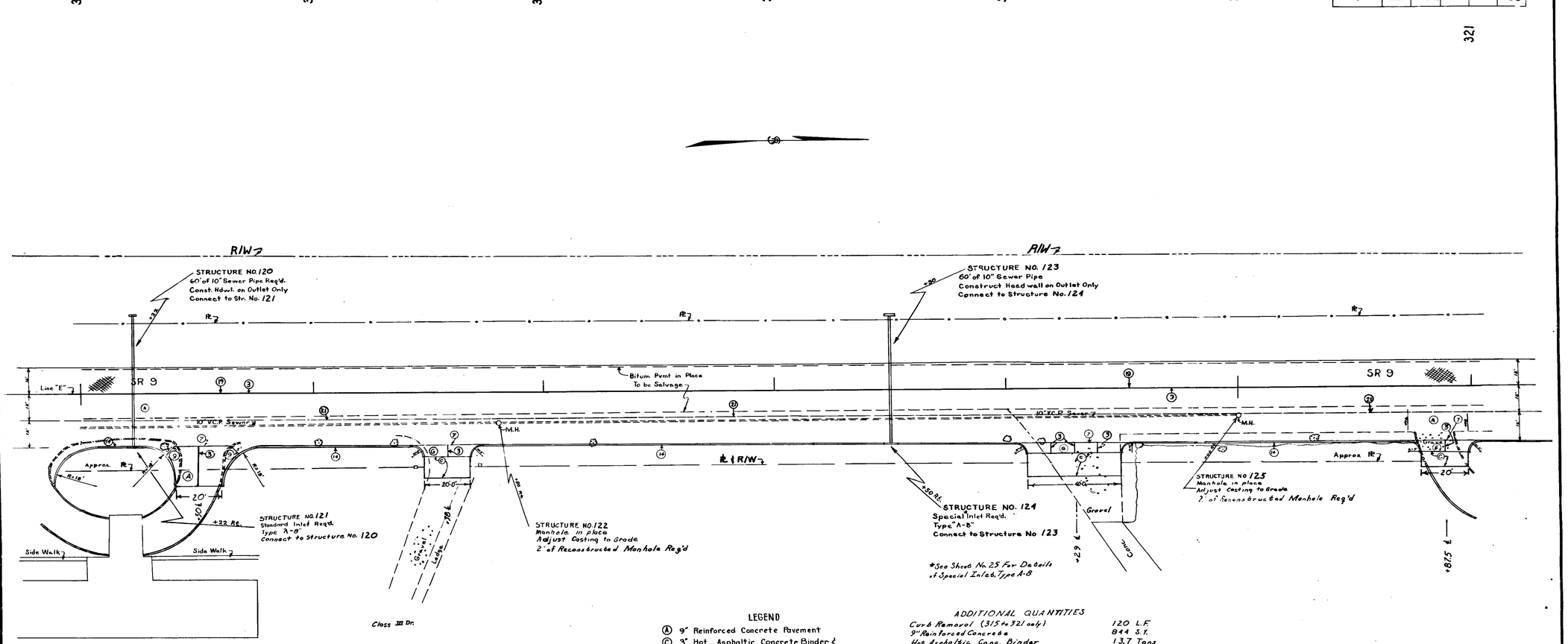
| | |
|---|---|
| Curb Removal | 43 L.F. |
| 9" Reinforced Conc. Pavement | 905 S.Y. |
| 1" Preformed Joint Filler | 10 L.F. |
| Concrete Curb | 5 L.F. |
| Integral Concrete Curb | 591 L.F. |
| Subbase Type I or II & for Salvaged Rd. Mtl. | 156 C.Y. |

# DETAILS

Scale: 1" = 20'

WMM 5-26-59

| FEDERAL ROAD REGION NO | STATE | F PROJ NO | FISCAL YEAR | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578-(1) | 1959 | 32 | 165 |




## LEGEND

- (A) 9" Reinforced Concrete Pavement
- (C) 3" Hot Asphaltic Concrete Binder & 5" Salvaged Road Material or Comp. Agg. Base
- (G) Commercial Drive Pavement
- (3) Longitudinal Joint
- (7) Keyway Joint
- (9) 1" Preformed Joint Filler
- (11) Integral Concrete Curb
- (12) 6" Traffic Lane Strip
- Curb in Place to be removed

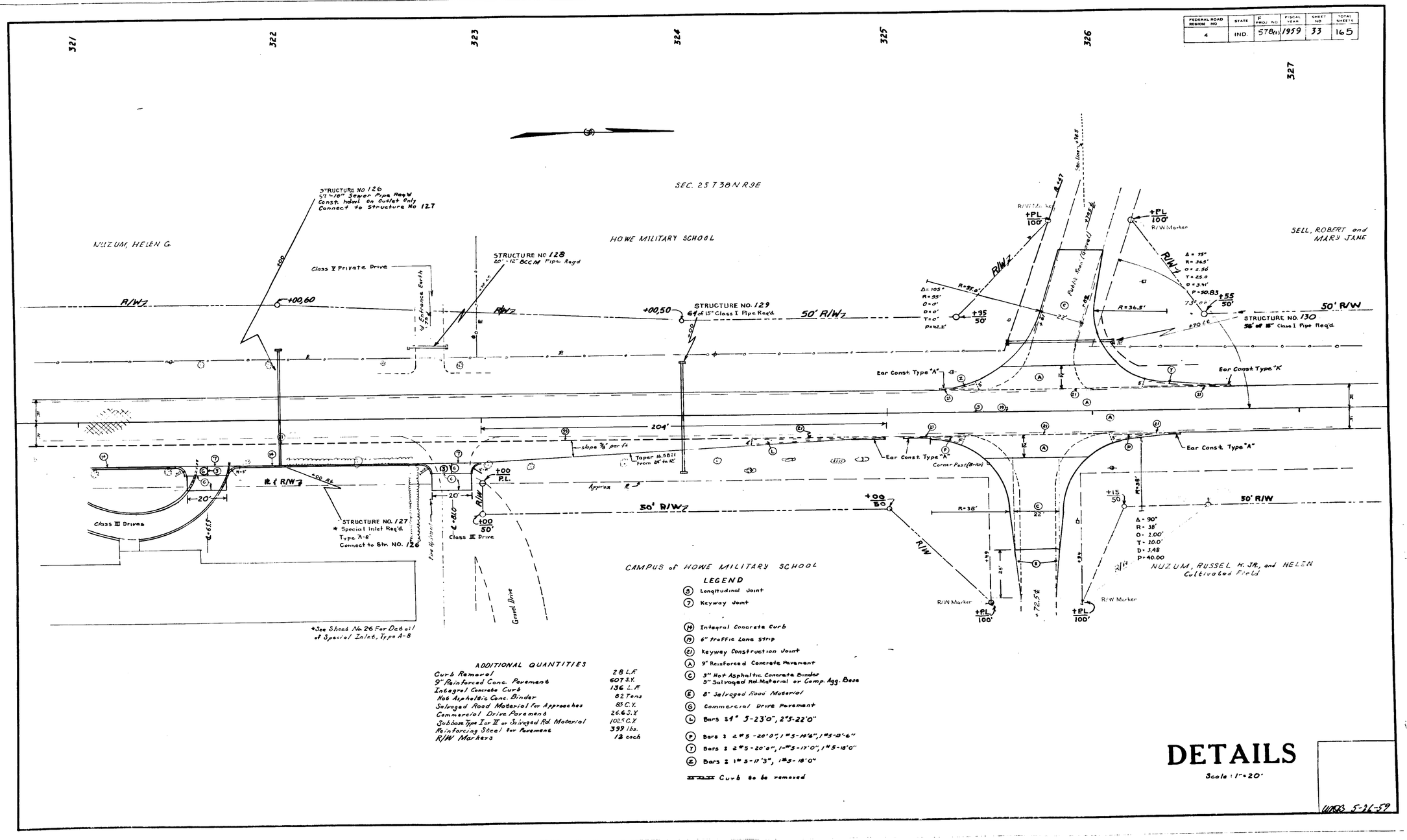
## ADDITIONAL QUANTITIES

| | |
|---|---|
| Curb Removal (315 to 321 only) | 120 L.F. |
| 9" Reinforced Concrete | 844 S.Y. |
| Hot Asphaltic Conc. Binder | 13.7 Tons |
| Selv. Rd. Material for Approaches | 12.7 C.Y. |
| Comm. Dr. Pavement | 51 S.Y. |
| 1" Preformed Joint Filler | 10 L.F. |
| Integral Concrete Curb | 492 L.F. |
| Sub base Type "I" or "II" or Selv. Rd. Material | 156 C.Y. |

# DETAILS

WWP 5-21-59

| FEDERAL ROAD REGION NO | STATE | F. PROJ. NO | FISCAL YEAR | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(11) | 1959 | 33 | 165 |



| FEDERAL ROAD REGION NO | STATE | F PROJ NO | FISCAL YEAR | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(1) | 1959 | 34 | 165 |

REV. QUANTITY 11-16-59

## PUBLIC ROAD APPROACHES AND PRIVATE DRIVES

| COMM.[1] & PVT.[2] DR. PVMT. | LOCATION | DESCRIPTION | EXCAVATION CU. YDS. CUT | FILL | LENGTH (FEET) | WIDTH (FEET) | RADII (FEET) | Salvaged Rd. Mat. or Compacted Agg. Base Cu. Yds. 3" | 5" | 8" | 7" Reinf. Conc. Sq. Yds. | 210# HAC Binder Sq. Yds. | 300# HAC Binder Sq. Yds. | 90# HAC Surface Sq. Yds. | Guide Posts Type "B" | Reinf. Steel Lbs. | Skew |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.0(2) | 27+75 Rt. | Class III | | | 32 | 20' | 5'-5' | | 7.6 | | | | 55.0 | | | | |
| 17.0(1) | 28+50 Rt. | Class III | | 9 | 30 | 20' | 5'-5 | | 7.4 | | | | 53.0 | | | | |
| | 31+52 Rt. | Class IV | | | 48 | 20' | 20' | | 7.5 | | | | 125.7 | | 6 | | |
| | 32+00 Rt. | Class IV | | | 60 | 20' | 20' | | 21.2 | | | | 152.5 | | 6 | | |
| | 33+13 Rt. | Class II | | | 96 | 12' | | 12.3 | | | | | 147.9 | | | | |
| | | | | | | | | | | | | | | | | | |
| | 34+46.5 Rt. | Type "B" | 530 | 232 | 191 | 22' | | | 102.6 | | | 738.9 | | 738.9 | | | |
| | 35+65 Rt. | Class II | | | 39 | 12' | 25'-15' | 6.0 | | | | | 72.4 | | | | |
| | 43+70 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 43+89 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | |
| | 44+05 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | | | | | | | | | | | | | | | | | |
| | 44+60 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 45+29 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | |
| 84.7(2) | 47+05 Rt. | Class II | | | 29 | 20' | 25'-15' | | | | | | 104.7 | | | | |
| | 47+85 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 49+04 Rt. | Class IV | | | 38 | 20' | 20' | | 14.4 | | | | 103.5 | | 6 | | |
| | | | | | | | | | | | | | | | | | |
| | 50+37 Lt. | Class IV | | | 38 | 20' | 20' | | 14.4 | | | | 103.5 | | 6 | | |
| | 53+34 Rt. | Type "D" | | | 38 | 20' | 25' | | | 8.9 | 54.0 | | | | | 48.4 | |
| | 54+34 Lt. | Class IV | | | 46 | 30' | 20' | | 22.8 | | | | 164.0 | | 6 | | 56° |
| | 56+21 Lt. | Class IV | 7 | | 49 | 30' | 20' | | 26.5 | | | | 191.0 | | 6 | | 51° |
| | 57+24 Rt. | Class IV | | | 54 | 30' | 20' | | 25.1 | | | | 181.0 | | 6 | | 45° |
| | | | | | | | | | | | | | | | | | |
| | 58+81 Rt. | Class IV | | | 40 | 30' | 20' | | 21.0 | | | | 151.0 | | 6 | | 70° |
| | 59+60 Rt. | Class V | | | | | | | | | | | | | | | |
| | 61+50 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | |
| | 62+97 Lt. | Type "B" | 84 | 134 | 189.8 | 22' | 36'-62.5' | | 91.4 | | | 658.0 | | 658.0 | | | |
| | 2+35 Rt. S-2-E | Class II | | | 43 | 12 | 25'-15' | 6.6 | | | | | 78.9 | | | | |
| | | | | | | | | | | | | | | | | | |
| | 70+30 Lt. | Class II | 11 | | 47 | 12' | 15'-25' | 6.9 | | | | | 82.9 | | | | |
| | 70+43 Rt. | Class V | 13.9 | | | | | | | | | | | | | | |
| | 76+00 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 76+99 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 77+25 Lt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | | | | | | | | | | | | | | | | | |
| | 79+20 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 79+75 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 80+95 Rt. | Class II | | 15 | 38 | 12 | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 83+23 Rt. | Class IV | | 19 | 42 | 20' | 20' | | 15.6 | | | | 112.5 | | 6 | | |
| | 84+19 Rt. | Class IV | | 18 | 38 | 20' | 20' | | 14.4 | | | | 103.5 | | 6 | | |
| | | | | | | | | | | | | | | | | | |
| | 85+70 Rt. | Class IV | | 12 | 38 | 20' | 20' | | 14.4 | | | | 103.5 | | 6 | | |
| | 95+58 Lt. | Class II | | 26 | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | |
| | 105+60 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | |
| | 106+69 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | |
| | 107+26 Lt. | Class V | | 5 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 112+70 Rt. | Type "B" | | 51 | 44 | 22' | 38' | | 19.7 | | 101.3 | | 119.9 | | | 141.8 | |
| | 113+19 Lt. | Type "B" | | 245 | 92 | 22' | 38' | | 34.6 | | 101.3 | 249.2 | | 249.2 | | 141.8 | |
| | 118+29 Rt. | Class II | | | 43 | 12' | 25'-15' | 6.5 | | | | | 77.5 | | | | |
| | 119+47 Rt. | Class II | | | 44 | 12' | 25'-15' | 6.6 | | | | | 78.9 | | | | |
| | 119+94 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | |
| | | | | | | | | | | | | | | | | | |
| | 124+91 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 130+54 Lt. | Class V | | | | | | | | | | | | | | | |
| | 130+72 Lt. | Class V | | | | | | | | | | | | | | | |
| | 131+57 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 133+55 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | | | | | | | | | | | | | | | | | |
| | 134+42 Rt. | Class IV | | | 38 | 20' | 20' | | 14.4 | | | | 103.5 | | 6 | | |
| | 135+47 Rt. | Class IV | | | 38 | 20' | 20' | | 14.4 | | | | 103.5 | | 6 | | |
| | 136+16 Rt. | Class V | | | | | | | | | | | | | | | |
| | 136+52 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 137+89 Rt. | Class II | | 12 | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | |
| | 139+70 Lt. | Class V | | 13 | | | | | | | | | | | | | |

## PUBLIC ROAD APPROACHES AND PRIVATE DRIVES

| LOCATION | DESCRIPTION | EXCAVATION CU. YDS. CUT | FILL | LENGTH (FEET) | WIDTH (FEET) | RADII (FEET) | 3" | 5" | 8" | 9" Reinf. Conc. Sq. Yds. | 210# HAC Binder Sq. Yds. | 300# HAC Binder Sq. Yds. | 90# HAC Surface Sq. Yds. | Comm. Dr. Pvmt. | Subbase Type I or II | Reinf. Steel Lbs. | Skew | Guide Posts Type "B" |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 142+76 Rt. | Class V | | | | | | | | | | | | | | | | | |
| 159+48 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | | |
| 166+13.5 Rt. | Type "B" | | 31 | 84.7 | 22' | 36.5'-55' | | 33.0 | 0.4 | 109.1 | | 237.3 | | | | 115.0 | 75° | |
| 166+13.5 Lt. | Type "B" | | 40 | 84.7 | 22' | 55'-36.5' | | 33.0 | 0.7 | 109.1 | | 237.3 | | | | 115.0 | 75° | |
| 4+09 Lt. PR S-3-E | Class IV | | | | 40' | 20' | | 10.6 | | | | 76.7 | | | | | | 6 |
| | | | | | | | | | | | | | | | | | | |
| 167+44 Lt. | Class IV | | 19 | 38 | 40' | 20' | | 26.1 | | | | 187.9 | | | | | | 6 |
| 168+51 Lt. | Class II | | 5 | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | | |
| 169+25 Lt. | Class V | | 8 | | | | | | | | | | | | | | | |
| 186+86 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | | |
| 192+63 Rt. | Class V | | 7 | | | | | | | | | | | | | | | |
| 205+89 Rt. | Class V | | | | | | | | | | | | | | | | | |
| 192+77 Rt. | Class V | | 6 | | | | | | | | | | | | | | | |
| 192+83 Lt. | Class V | | | | | | | | | | | | | | | | | |
| 207+00 Lt. | Class V | | 19 | | | | | | | | | | | | | | | |
| 209+60 Lt. | Class V | | 8 | | | | | | | | | | | | | | | |
| 211+89 Rt. | Class V | | 19 | | | | | | | | | | | | | | | |
| 205+89 Lt. | Class V | | 7 | | | | | | | | | | | | | | | |
| 213+17 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | | |
| 194+87 Rt. | Class V | | | | | | | | | | | | | | | | | |
| 215+61 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | | | |
| 219+34.7 Rt. | Type "B" | | | 60 | 22' | 38.0' | | 23.7 | | 101.3 | 170.7 | | 170.7 | | | 141.8 | 89°45' | |
| 219+34.7 Lt. | Type "B" | | | 60 | 22' | 38.0' | | 21.8 | 1.6 | 101.3 | | 157.4 | | | | 141.8 | | |
| | | | | | | | | | | | | | | | | | | |
| 221+65 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | | | |
| 223+54 Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | | | |
| 232+62 Lt. | Class V | | | | | | | | | | | | | | | | | |
| 232+76 Lt. | Class V | | | | | | | | | | | | | | | | | |
| 232+89 Rt. | Class V | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 245+78 Lt. | Class V | | | | | | | | | | | | | | | | | |
| 252+50 Lt. | Class V | | 14 | | | | | | | | | | | | | | | |
| 259+33 Lt. | Class V | | 47 | | | | | | | | | | | | | | | |
| 259+47 Lt. | Class V | | 48 | | | | | | | | | | | | | | | |
| 259+53 Rt. | Class II | | 24 | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 273+01.8 Rt. | Type "B" | | 5 | 60 | 22' | 38.0' | | 23.8 | | 101.3 | 171.0 | | 171.0 | | | 141.8 | | |
| 278+55 Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | | |
| 279+30 Rt. | Class V | | | | | | | | | | | | | | | | | |
| 290+18 Rt. | Type "B" | | 626 | 131 | 22' | 38.0' | | 36.6 | | 101.3 | 263.8 | | 263.8 | | | 141.8 | | |
| 293+24.8 Rt. | Class III | | 36 | 26 | 40' | 5' | | 15.7 | | | | 108.9 | | 27.1 | | | | |
| | | | | | | | | | | | | | | | | | | |
| 293+99.8 Rt. | Class III | | | 16 | 40' | 5' | | 6.8 | | | | 48.9 | | 24.4 | | | | |
| 294+93.8 Rt. | St. Approach | 445 | 9 | 83 | 48' | 25' | | | | 947.6 | | | | | | 63.0 | | |
| 294+93.8 Lt. | Type "B" | 114 | 183 | 40 | 48' | 38'-40.82' | | 35.9 | | 312.9 | 254.3 | | 254.3 | | | 218.0 | | |
| 295+67.8 Rt. | Class III | 13 | | 26 | 40' | 5' | | 16.1 | | | | 115.6 | | 24.4 | | | | |
| 296+46 Rt. | Class III | 30 | | 26 | 40' | 5' | | 16.1 | | | | 115.6 | | 24.4 | | | | |
| | | | | | | | | | | | | | | | | | | |
| 740+51.4 Lt. Line "A" | Class III | 5 | | 16 | 30' | 5' | | 5.1 | | | | 36.7 | | 18.8 | | | | |
| 740+60.5 Rt. Line "A" | Class III | | | 9 | 40' | 5' | | 2.5 | | | | 17.8 | | 24.4 | | | | |
| 740+97.5 Lt. Line "A" | Class III | | | 5 | 35' | 5' | | | | | | | | 21.6 | | | | |
| 741+32 Rt. Line "A" | Class III | | | 5 | 40' | 5' | | | | | | | | 27.1 | | | | |
| 742+00 Rt. Line "A" | Class II | | | 26 | 12' | 25'-15' | 4.6 | | | | | 55.0 | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 297+71 Lt. | Class III | | | 16 | 40' | 5' | | 6.9 | | | | 50.0 | | 24.4 | | | | |
| 298+77 Lt. | Class III | | | 16 | 40' | 5' | | 6.9 | | | | 50.0 | | 24.4 | | | | |
| 299+70 Lt. | Class IV | | | 39 | 20' | 20' | | 12.5 | | | | 92.4 | | | | | | |
| 299+72 Rt. | St. Approach | | | 25 | 33' | 38'-25' | | 39.5 | | 147.7 | 284.1 | | 284.1 | | | 133.9 | | 6 |
| 299+72 74' Rt. | Class III | | | 5' | 40' | 5' | | 16.1 | | | | 115.6 | | | | | | |
| 300+52 Rt. | Class III | | | 26 | 40' | 5' | | | | | | | | 149.[illegible] ~~138.6~~ | | | | |
| 300+97 Lt. | Class IV | | | 38 | 20' | 20' | | 14.4 | | | | 103.5 | | | | | | 6 |
| 301+12 Rt. | Class III | | | 26 | 40' | 5' | | | | | | | | 149.2 ~~138.5~~ | | | | |
| 303+68 Rt. | Type "B" | | 41 | 81.5 | 30' | 38' | | 47.1 | | 112.0 | 339.6 | | 339.6 | | | 141.8 | | |
| 304+31 Rt. | Class II | | | 36 | 12' | 25'-15' | 5.7 | | | | | 68.2 | | | | | | |
| 305+31 Rt. | Class IV | | | 36 | 14' | 20' | | 10.4 | | | | 75.1 | | | | | | 6 |
| 305+42 Lt. | Class II | 5 | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | | |

# DETAILS

WRD 5-26-59

| FEDERAL ROAD REGION NO | STATE | F. PROJ. NO | FISCAL YEAR | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578(1) | 1959 | 35 | 165 |

## PUBLIC ROAD APPROACHES AND PRIVATE DRIVES

| LOCATION | | DESCRIPTION | EXCAVATION CU. YDS. Cut | Fill | LENGTH (FEET) | WIDTH (FEET) | RADII (FEET) | Tentatively Road Mix or Compacted Agg. Base Cu. Yds. 3" | 5" | 8" | 9" REINF. CONC. SQ. YDS. | 2.10" HAC BINDER SQ YDS. | 3.00" HAC BINDER SQ. YDS | 2.00" HAC SURFACE SQ. YDS. | COMM. DR. PVMT | | REINF. STEEL LBS. | SKEW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 306+85 | Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | |
| 307+74 | Rt. | St. Approach | | 36 | 54 | 42' | 38'-18' | | 24.8 | | 135.3 | 182.0 | | 182.0 | | | 70.9 | |
| 307+78 | Lt. | Type "B" | 8 | | 78 | 22' | 41.85'-32' | | 29.3 | | 103.8 | 211.2 | | 211.2 | | | 135.4 | 84° |
| 314+72 | Rt. | St. Approach | 43 | | 26 | 30' | 18' | | | | 104.9 | | | | | | 56.8 | |
| 315+50 | Rt. | St. Approach | 11 | | 18 | 20' | 18' | | | | 44.4 | | | | | | 56.8 | |
| | | | | | | | | | | | | | | | | | | |
| 316+58 | Rt. | Class III | 6 | | 15 | 20' | 5' | | 3.4 | | | | 24.4 | | 13.3 | | | |
| 319+34 | Rt. | Class III | 16 | | 16 | 40' | 5' | | 6.8 | | | | 48.9 | | 24.4 | | | |
| 320+87.5 | Rt. | Class III | | | 13 | 20' | 5' | | 2.5 | | | | 17.8 | | 13.3 | | | |
| 321+65.5 | Rt. | Class III | 5 | | 12 | 20' | 5' | | 2.2 | | | | 15.6 | | 13.3 | | | |
| 322+75 | Lt. | Class V | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 322+81 | Rt. | Class III | | | 14 | 20' | 5' | | 2.8 | | | | 20.0 | | 13.3 | | | |
| 325+70.5 | Lt. | Type "B" | 6 | | 76 | 22' | 35'-36.5 | | 28.8 | | 109.1 | | 207.1 | | | | 115.0 | 75° |
| 325+72.5 | Rt. | Type "B" | | | 60 | 22' | 38' | | 21.8 | 2.5 | 101.3 | | 157.3 | | | | 141.8 | |
| 335+67 | Rt. | Class V | | | | | | | | | | | | | | | | |
| 346+74 | Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 346+80 | Rt. | Class V | | | | | | | | | | | | | | | | |
| 347+32 | Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | |
| 359+50 | Rt. | Class V | | | | | | | | | | | | | | | | |
| 365+94 | Lt. | Class V | | 10 | | | | | | | | | | | | | | |
| 367+60 | Rt. | Class II | | 8 | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 369+61 | Rt. | Class V | | 6 | | | | | | | | | | | | | | |
| 378+48 | Lt. | Type "B" | | 55 | 75 | 22' | 38' | | 27.3 | | 101.3 | 196.5 | | 196.5 | | | 141.8 | |
| 378+49 | Rt. | Type "B" | | 37 | 60 | 22 | 38' | | 22.2 | | 101.3 | 159.8 | | 159.8 | | | 141.8 | |
| 381+31 | Lt. | Class II | | | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | |
| 384+32 | Rt. | Class V | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 395+18 | Lt. | Class II | | | 38 | 12' | 15'-25' | 6.2 | | | | | 74.9 | | | | | |
| 396+05 | Lt. | Class II | 6 | | 43 | 12' | 15'-25' | 6.5 | | | | | 77.5 | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 401+47 | Lt. | Class II | | 10 | 38 | 12' | 15'-25' | 5.9 | | | | | 70.9 | | | | | |
| 406+88 | Rt. | Class II | | | 38 | 12' | 25'-15' | 5.9 | | | | | 70.9 | | | | | |
| 408+30 | Rt. | Class V | | | | | | | | | | | | | | | | |

## SUBSURFACE PIPE DRAIN

| Station | | Length | Connection | Pay Length | C.Y. Aggregate For Subsurface Drainage | Connect to Str. No | Sodding S.Y. | Guide Posts Type "A", Each | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 68+28 | Rt. | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 68+28 to 77+28 | | 930' | | 930' | 93.0 | | | | |
| 77+28 to 79+50 | | 222' | | 222 | 22.2 | | | | |
| 79+50 | Rt. | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 86+00 to 90+50 | | 450' | | 450' | 45.0 | | | | |
| 90+50 | Rt. | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 104+50 to 112+25 | | 777 | T | 782' | 77.7 | 38 | | | |
| 112+25 to 121+00 | | 875' | | 876' | 87.5 | | | | |
| 121+00 | Rt. | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 123+70 to 137+20 | | 1350' | | 1350' | 135.0 | | | | |
| 137+20 | Rt | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 138+80 to 147+00 | | 820' | T | 825 | 82.0 | 55 | | | |
| 151+20 to 164+00 | | 1240' | T | 1245' | 124.0 | 56 | | | |
| 165+50 to 166+86 | | 136' | | 138 | 13.6 | | | | |
| 166+86 | Rt | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 178+00 to 193+00 | | 1500' | | 1500' | 150.0 | | | | |
| 193+00 | Rt | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 212+60 | Rt. | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 212+60 to 217+00 | | 440' | | 441 | 44.0 | | | | |
| 218+50 | Rt | 20' | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 218+50 to 219+60 | | 110 | | 111 | 11.0 | | | | |
| 225+00 to 233+25 | | 825 | | 825 | 82.5 | | | | |
| 233+25 | Rt | 20 | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 262+00 to 268+00 | | 600 | | 600 | 60.0 | | | | |
| 268+00 | Rt. | 20 | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 270+25 to 271+25 | | 100 | | 102 | 10.0 | | | | |
| 271+25 | Rt | 20 | 45° Elbow | 23' | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| | | | | | | | | | |
| 272+50 to 273+50 | | 100 | | 102 | 10.0 | | | | |
| 273+50 | Rt. | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 293+00 | Rt. | 28 | 45° Elbow | 30 | 2.8 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 292+92 to 297+00 | | 408 | | 408 | 40.8 | 88 | | | |
| 297+00 to 302+85 | | 585 | T | 591 | 58.5 | 103 | | | |
| 302+85 to 308+97 | | 612 | T | 617 | 61.2 | 103 | | | |
| 309+00 to 310+47 | | 147 | | 147 | 14.7 | 114 | | | |
| 310+53 to 311+70 | | 117 | | 117 | 11.7 | 117 | | | |
| 311+70 to 314+12 | | 242 | | 249 | 24.2 | 117 | | | |
| 314+18 to 315+22 | | 104 | | 105 | 10.4 | 120 | | | |
| 315+22 to 317+27 | | 205 | | 207 | 20.5 | 120 | | | |
| 317+33 to 318+50 | | 117 | | 117 | 11.7 | 123 | | | |
| 318+50 to 319+97 | | 147 | | 147 | 14.7 | 123 | | | |
| 320+03 to 322+00 | | 197 | | 198 | 19.7 | 126 | | | |
| 322+00 to 324+00 | | 200 | | 201 | 20.0 | 126 | | | |
| 324+00 to 334+00 | | 1002 | T | 1007 | 100.2 | 129 | | | |
| 334+00 to 351+00 | | 1700 | | 1701 | 170.0 | | | | |
| 351+00 | Rt. | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 351+00 to 355+00 | | 400 | | 402 | 40.0 | | | | |
| 355+00 | Rt. | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 355+00 to 357+00 | | 200 | | 201 | 20.0 | | | | |
| 357+00 | Rt. | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 357+00 to 360+50 | | 350 | | 351 | 35.0 | | | | |
| 360+50 | Rt | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 360+50 to 363+50 | | 300 | | 300 | 30.0 | | | | |
| 363+50 | Rt. | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 363+50 to 365+50 | | 200 | | 201 | 20.0 | | | | |
| 365+50 | Rt. | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| | | | | | | | | | |
| 378+91 | | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 378+91 to 381+91 | | 300 | | 300 | 30.0 | | | | |
| 381+91 to 397+80 | | 1649 | | 1650 | 164.9 | | | | |
| 397+80 | Rt | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| | | | | | | | | | |
| 401+60 | Rt | 20 | 45° Elbow | 23 | 2.0 | | 1 | 1 | Transv. Outlet Dr. Provide Outlet Screen |
| 401+60 to 410+00 | | 840 | | 840 | 84.0 | | | | |
| 410+00 to 415+00 | | 500 | T | 506 | 50.0 | 147 | | | |
| 415+00 to 417+89 | | 289 | T | 29 | 28.9 | 147 | | | |

# DETAILS

WRD 8-26

# STRUCTURE DATA

| Federal Road Region No. | State | F Proj. No. | Fiscal Year | Sheet No. | Total Sheets |
|---|---|---|---|---|---|
| 4 | IND. | 578-(1) | 1959 | 36 | 165 |

| Structure Number | Location | Size | Description | Skew | Length "L" | Height "H" | Wings "W" | Flow Line Up Stream Elev. | Flow Line Down Stream Elev. | Concrete Class "D" Cu.Yds. | Special Borrow Grade "B" Cu.Yds. | Reinforcing Steel Lbs. | Remarks | Plans on Sheet No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 31+52 Rt. | 12" | B.C.C.M. Pipe | | 28' | | | | | 0.58 | | | | |
| 2 | 32+00 Rt. | 12" | B.C.C.M. Pipe | | 28' | | | | | 0.58 | | | | |
| 3 | 33+13 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 4 | 34+56 Rt. | 15" | Class I Pipe | | 60' | | | | | 0.75 | | | Const. Outlet thru spl."L" Hdwl. common with Str. No.5; Change "G" to 3'-6" | |
| 5 | 34+99 | 15" | Class I Pipe | | 44' | | | | | 0.35 | | | Extend Str. 14' on Lt. and 30' on Rt.- See Str. No.4 For Headwall on Rt. | |
| 6 | 35+65 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 7 | 43+70 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 8 | 43+89 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 9 | 44+05 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 10 | 44+60 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 11 | 45+29 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 12 | 47+85 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 13 | 49+04 Rt. | 12" | B.C.C.M. Pipe | | 32 | | | | | 0.58 | | | Remove Pipe in Place | |
| 14 | 50+37 Lt. | 12" | B.C.C.M. Pipe | | 32' | | | | | 0.58 | | | Remove Pipe in Place | |
| 15 | 53+34 Rt. | 15" | B.C.C.M. Pipe | | 42' | | | | | 0.69 | | | Remove Pipe in Place | |
| 16 | 54+34 Lt. | 12" | B.C.C.M. Pipe | | 42' | | | | | 0.58 | | | Remove Pipe in Place | |
| 17 | 56+21 Lt. | 12" | B.C.C.M. Pipe | | 48' | | | | | 0.58 | | | Remove Pipe in Place | |
| 18 | 57+21 | 12" | R.C.,V.C.,C.I. or Conc. Pipe | | 165' | | | | | | 18 | | Remove Field Tile in Place, Connect to Field Tile in Place | |
| 19 | 57+47 Rt. | 12" | B.C.C.M. Pipe | | 42' | | | | | 0.58 | | | Remove Pipe in Place | |
| 20 | 58+10 | 24" | B.C.C.M. Pipe | | 20' | | | | | 3.75 | | | Extend Str. in Place 8' on Lt. & 12' on Rt. | |
| 21 | 58+73 Rt. | 12" | B.C.C.M. Pipe | | 48' | | | | | 0.58 | | | Remove Pipe in Place | |
| 22 | 59+60 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 23 | 61+50 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 24 | 2+35 Rt."S-2-E" | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 25 | 70+30 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 26 | 70+43 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 27 | 76+00 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 28 | 77+00 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 29 | 77+25 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 30 | 79+20 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 31 | 79+75 Rt. | 12" | Class I Pipe | | 28' | | | | | 0.58 | | | Remove Pipe in Place | |
| 32 | 80+95 Rt. | 12" | Class I Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 33 | 82+00 | 15" | Class I Pipe | | 70' | | | 920.20 | 920.00 | 1.71 | 12 | | | |
| 34 | 84+19 Rt. | 12" | B.C.C.M. Pipe | | 32' | | | | | 0.58 | | | Remove Pipe in Place | |
| 35 | 85+70 Rt. | 12" | Class I Pipe | | 32' | | | | | 0.58 | | | Remove Pipe in Place | |
| 36 | 95+58 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 37 | 103+70 | 24" | Class I Pipe | | 66' | | | 903.53 | 903.47 | 3.75 | 10 | | Remove Pipe in Place | |
| 38 | 106+69 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 39 | 112+25 | 15" | Class I Pipe | | 62' | | | 897.0 | 895.3 | 1.20 | 6 | | Remove Pipe in Place | |
| 40 | 114+75 | 8" | Sewer Pipe | | 99' | | | | | | | | Remove Field Tile in Place; Connect to Field Tile in Place | |
| 41 | 118+29 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 42 | 119+47 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 43 | 119+94 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 44 | 122+25 | 15" | Class I Pipe | | 62' | | | 886.81 | 886.60 | 1.71 | 11 | | Remove Pipe in Place | |
| 45 | 130+64 Lt. | 12" | B.C.C.M. Pipe | | 36' | | | | | 0.58 | | | Remove Pipe in Place | |
| 46 | 131+57 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 47 | 133+55 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 48 | 134+42 Rt. | 12" | B.C.C.M. Pipe | | 32' | | | | | 0.58 | | | Remove Pipe in Place | |
| 49 | 135+47 Rt. | 12" | B.C.C.M. Pipe | | 32' | | | | | 0.58 | | | Remove Pipe in Place | |
| 50 | 135+95 Rt. | 6" | Sewer Pipe | | 9' | | | | | | | | To Terminate Field Tile | |
| 51 | 136+16 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 52 | 136+44 Rt. | 15" | Class I Pipe | | 24' | | | | | 0.69 | | | Remove Pipe in Place | |
| 53 | 136+52 Rt. | 6" | Sewer Pipe | | 9' | | | | | | | | To Terminate Field Tile | |
| 54 | 137+89 Rt. | 15" | Class I Pipe | | 24' | | | | | 0.69 | | | Remove Pipe in Place | |
| 55 | 138+47 Lt. | | Catch Basin Type "C-5" & | | | | | | | | | | Connect to Field Tile in Place | |
| | | 6" | Sewer Pipe | | 6' | | | | | | | | | |
| 56 | 138+80 | 24" | Class I Pipe | | 64' | | | 877.8 | 877.5 | 3.75 | 12 | | Remove Pipe in Place | |
| 57 | 151+60 | 15" | Class I Pipe | | 64' | | | 879.4 | 879.3 | 0.69 | 6 | | | |
| 58 | 159+48 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 59 | 167+44 Lt. | 12" | Class I Pipe | | 48' | | | | | 0.58 | | | | |
| 60 | 168+51 Lt. | 12" | Class I Pipe | | 24' | | | | | 0.58 | | | Remove Pipe in Place | |
| 61 | 169+25 Lt. | 12" | Class I Pipe | | 20' | | | | | 0.58 | | | Remove Pipe in Place | |
| 62 | 186+86 Lt. | 15" | B.C.C.M. Pipe | | 24' | | | | | 0.69 | | | | |
| 63 | 192+63 Rt. | 15" | B.C.C.M. Pipe | | 36' | | | | | 0.69 | | | | |
| 64 | 192+83 Lt. | 15" | B.C.C.M. Pipe | | 20' | | | | | 0.69 | | | Remove Pipe in Place | |
| 65 | 205+89 Rt. | 18" | B.C.C.M. Pipe | | 34' | | | | | 0.80 | | | Remove Pipe in Place | |
| 66 | 205+89 Lt. | 18" | B.C.C.M. Pipe | | 34' | | | | | 0.80 | | | | |
| 67 | 206+13 | 36" | B.C.C.M. Pipe | | 84' | | | 864.00 | 863.90 | | 60 | | Remove Pipe in Place, No Headwall Req'd. | |
| 68 | 207+00 Lt. | 12" | B.C.C.M. Pipe | | 22' | | | | | 0.58 | | | Remove Pipe in Place | |
| 69 | 209+60 Lt. | 12" | Class I Pipe | | 22' | | | | | 0.58 | | | | |
| 70 | 211+89 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 71 | 213+17 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 72 | 218+00 | 18" | Class I Pipe | | 68' | | | 871.7 | 871.5 | 1.55 | 8 | | | |
| 73 | 221+65 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 74 | 223+54 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 75 | 225+00 | 18" | Class I Pipe | | 62' | | | 872.5 | 872.3 | 0.80 | 7 | | | |

| Structure Number | Location | Size | Description | Skew | Length "L" | Height "H" | Wings "W" | Flow Line Up Stream Elev. | Flow Line Down Stream Elev. | Concrete Class "D" Cu.Yds. | Special Borrow Grade "B" Cu.Yds. | Reinforcing Steel Lbs. | Remarks | Plans on Sheet No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 76 | 232+69 Lt. | 12" | B.C.C.M. Pipe | | 36' | | | | | 0.58 | | | Remove Pipe in Place | |
| 77 | 232+90 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | Remove Pipe in Place | |
| 78 | 245+78 Lt. | 12" | B.C.C.M. Pipe | | 22' | | | | | 0.58 | | | Remove Pipe in Place | |
| 79 | 252+50 Lt. | 12" | Class I Pipe | | 28' | | | | | 0.58 | | | Remove Pipe in Place | |
| 80 | 255+55 | 30" | Class I Pipe | | 72' | | | 862.6 | 862.4 | 5.78 | 16 | | Remove Pipe in Place | |
| 81 | 278+55 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 82 | 279+30 Rt. | 12" | Class I Pipe | | 20' | | | | | 0.58 | | | Remove Pipe in Place | |
| 83 | 290+27 Rt. | | Standard Manhole Type "B-4" Req'd | | | | | | | | | | Remove Inlet in Place; Connect to 15" Pipe in Place, Connect to Str. No. 84 | |
| 84 | 290+37 Rt. | 12" | R.C., V.C., C.I., or Conc. Pipe | | 20' | | | | | | 3 | | Connect to Strs. No. 83 & 85 | |
| 85 | 290+47 Rt. | | Standard Catch Basin Type "C-5" Req'd | | | | | | | | | | Connect to Str. No. 84 | |
| 86 | 292+78 Rt. | | Standard Manhole Type "A-4" Req'd. | | | | | | | | | | Remove Inlet in Place ; Connect to Str. No. 87 | |
| 87 | 292+78 Rt. | | Standard Catch Basin Type "C-5" & | | | | | | | | | | | |
| * | | 12" | R.C., V.C., or Conc. Pipe | | 6' | | | | | | | | Connect to Str. No. 86 | |
| 89 | 293+05 Rt. | | Inlet in Place | | | | | | | | | | Adjust Casting to Grade ; 4' of Reconstructed Manhole Req'd., Manhole Ring & Cover Type "4" Req'd. | |
| 90 | 293+82 Rt. | | Inlet in Place | | | | | | | | | | Adjust Casting to Grade Manhole Ring & Cover Type 4 Req'd., 1' Reconstructed Manhole Req'd | |
| 91 | 294+65 Rt. | | Standard Inlet Type "A-8" Req'd. | | | | | | | | | | Connect to Str. No. 92 | |
| 92 | 294+70 Rt. | 12" | R.C., V.C., C.I. or Conc. | | 18' | | | | | | 5 | | Connect to Strs No. 91 & 93 | |
| 93 | 294+73 Rt. | | Standard Manhole Type "A-4" Req'd | | | | | | | | | | Connect to Strs. No. 92 & 97 & to Pipes in Place; Remove Inlet in Place | |
| 94 | 741+20 Rt."A" | | Inlet in Place | | | | | | | | | | Adjust Casting to Grade | |
| 95 | 741+61 Rt."A" | | Inlet in Place | | | | | | | | | | No Changes Req'd. | |
| 96 | 742+00 Rt."A" | 12" | B.C.C.M. Pipe | | 32' | | | | | 0.58 | | | Remove Pipe in Place | |
| 97 | 294+98 Rt. | 12" | R.C., V.C., C.I., or Conc. Pipe | | 52' | | | | | | 15 | | Connect to Strs. No. 93 & 99 | |
| 98 | 295+11 Lt. | 15" | Class I Pipe | | 20' | | | | | 0.85 | | | Extend Str. in Place | |
| 99 | 295+22 Rt. | | Standard Inlet Type "A-8" Req'd. | | | | | | | | | | Connect to Str. No. 97; Remove Inlet in Place Sta. 295+21 ; Seal Outlet | |
| 100 | 298+77 Lt. | 12" | B.C.C.M. Pipe | | 46' | | | | | 0.58 | | | Remove Pipe in Place | |
| 101 | 299+70 Lt. | 12" | Class I Pipe | | 32' | | | | | 0.58 | | | | |
| 102 | 300+97 Lt. | 12" | B.C.C.M. Pipe | | 28' | | | | | 0.58 | | | | |
| 103 | 302+85 | 15" | Class I Pipe | | 78 | | | 872.0 | 872.0 | 0.69 | 8 | | | |
| 104 | 303+63 Rt. | 15" | Class I Pipe | | 50' | | | | | 0.69 | | | | |
| 105 | 304+31 Rt. | 12" | Class I Pipe | | 24' | | | | | 0.58 | | | | |
| 106 | 305+31 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 107 | 305+42 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 108 | 308+20 to 305+28 Lt. | 18" | Class I Pipe | | 292 | | | | | 0.80 | | | | |
| 109 | 306+85 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 110 | 307+02 Rt. | 12" | B.C.C.M. Pipe | | 8' | | | | | | | | No Headwalls Req'd. | |
| 111 | 307+09 Lt. | 12" | B.C.C.M. Pipe | | 8' | | | | | | | | No Headwalls Req'd. | |
| 112 | 307+33 Rt. | | Manhole in Place | | | | | | | | | | Adjust Casting to Grade , 2' of Reconstructed Manhole Req'd. | |
| 113 | 309+00 Rt. | | Standard Inlet Type "A-8" Req'd | | | | | | | | | | Connect to Str. No. 114 | |
| 114 | 309+00 | 10" | Sewer Pipe | | 63' | | | 876.1 | 874.8 | 0.26 | 11 | | Connect to Str. No. 115; Const. Hdwl. on Outlet Only | |
| 115 | 309+25 Rt. | | Manhole in Place | | | | | | | | | | Adjust Casting to Grade ; 2' of Reconstructed Manhole Req'd. | |
| 116 | 311+28 Rt. | | Manhole in Place | | | | | | | | | | Adjust Casting to Grade. 2' of Reconstructed Manhole | |
| 117 | 311+70 | 10" | Sewer Pipe | | 60' | | | 875.5 | 875.2 | 0.26 | 9 | | Connect to Str. No 118 ; Const. Hdwl. on Outlet Only | |
| 118 | 311+70 Rt. | | Standard Inlet Type "A-8" Req'd. | | | | | | | | | | Connect to Str. No 117 | |
| 119 | 313+42 Rt. | | Manhole in Place | | | | | | | | | | Adjust Casting to Grade , 2' of Reconstructed Manhole Req'd. | |
| 120 | 315+22 | 10" | Sewer Pipe | | 60' | | | 876.3 | 876.0 | 0.26 | 9 | | Connect to Str. No 121 ; Const. Hdwl. on Outlet Only | |
| 121 | 315+22 Rt. | | Standard Inlet Type "A-8" Req'd. | | | | | | | | | | Connect to Str. No. 120 | |
| 122 | 316+80 Rt. | | Manhole in Place | | | | | | | | | | Adjust Casting to Grade, 2' of Reconstructed Manhole Req'd. | |
| 123 | 318+50 | 10" | Sewer Pipe | | 60' | | | 876.7 | 876.6 | 0.26 | 9 | | Connect to Str. No. 124.; Const. Hdwl. on Outlet Only | |
| 124 | 318+50 Rt. | | Special Inlet Type "A-8" Req'd. | | | | | | | | | | Connect to Str. No. 123 | |
| 125 | 320+00 Rt. | | Manhole in Place | | | | | | | | | | Adjust Casting to Grade , 2' of Reconstructed Manhole Req'd | |
| 126 | 322+00 | 10" | Sewer Pipe | | 57' | | | 877.5 | 877.3 | 0.26 | 8 | | Connect to Str. No. 127 ; Const. Hdwl. on Outlet Only | |
| 127 | 322+00 Rt. | | Special Inlet Type "A-8" Req'd. | | | | | | | | | | Connect to Str. No. 126 | |
| 128 | 322+75 Lt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 129 | 324+00 | 15" | Class I Pipe | | 64' | | | 878.1 | 877.7 | 0.69 | 6 | | | |
| 130 | 325+70 Lt. | 15" | Class I Pipe | | 56' | | | | | 0.69 | | | | |
| 131 | 335+78 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 132 | 346+74 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 133 | 346+80 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 134 | 347+32 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 135 | 359+50 Rt. | 12" | Class I Pipe | | 22' | | | | | 0.58 | | | | |
| 136 | 365+92 Lt. | 12" | Class I Pipe | | 20' | | | | | 0.58 | | | | |
| 137 | 367+62 Rt. | 12" | Class I Pipe | | 24' | | | | | 0.58 | | | | |
| 138 | 369+60 Rt. | 12" | Class I Pipe | | 22' | | | | | 0.58 | | | | |
| 139 | 376+25 | 24" | Class I Pipe | | 68' | | | 871.9 | 871.7 | 3.75 | 9 | | Const. Outlet Ditch | |
| 140 | 381+31 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 141 | 384+35 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 142 | 395+18 Lt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 143 | 396+05 Lt. | 12" | Class I Pipe | | 24' | | | | | 0.58 | | | | |
| | | | | | | | | | | 0.69 | | | | |
| | | | | | | | | | | 0.58 | | | | |
| | | | | | | | | | | 0.69 | | | | |
| 144 | 401+47 Lt. | 15" | B.C.C.M. Pipe | | 24' | | | | | 0.69 | | | | |
| 145 | 406+91 Rt. | 12" | B.C.C.M. Pipe | | 24' | | | | | 0.58 | | | | |
| 146 | 408+30 Rt. | 12" | B.C.C.M. Pipe | | 20' | | | | | 0.58 | | | | |
| 147 | 415+00 | Min. Area 28 sq. in. | Class 9 Pipe | | 54' | | | 871.6 | 871.4 | 0.90 | 8 | | | |
| *88 | 292+92 Rt. | | Std. Inlet Type "A-8" and | | | | | | | | | | | |
| | | 12" | R.C., V.C., C.I., or Conc. Pipe | | 12' | | | | | | 3 | | Connect to Structure No. 89 | |

MAY 1957

| F PROJ. | LINE | SHEET | FILE |
|---|---|---|---|
| 578-(1) | "E" | 36 | |

# ESTIMATE OF QUANTITIES

| FEDERAL ROAD REGION NO. | STATE | F. PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 4 | IND. | 578 (1) | 1959 | 37 | 165 |

*Rev. Quantity 11-19-59*

## GRADING

| ITEM | UNIT | QUANTITY |
|---|---|---|
| | | 113,035 |
| COMMON EXCAVATION | CYS. | ~~112,407~~ |
| SOLID ROCK EXCAVATION | CYS. | |
| UNCLASSIFIED EXCAVATION | CYS. | |
| SPECIAL BORROW | CYS. | |
| OVERHAUL | CYS. | 42,027 |
| [illegible] HAUL | UNITS | 28,178 |
| PEAT EXCAVATION | CYS. | 9414 |
| SURCHARGE 4' | LFT. | |
| SURCHARGE 4'-8' | LFT. | |
| SURCHARGE 8'-12' | LFT. | |
| SURCHARGE 12'-16' | LFT. | |
| SURCHARGE 16'-20' | LFT. | |
| SURCHARGE 20'-24' | LFT. | |
| MACHINE OPERATION | HRS. | |
| MACHINE AVAILABILITY | HRS. | |
| DYNAMITE | LBS. | |
| [illegible] CASED TEST HOLES | LFT. | |
| [illegible] CASED TEST HOLES | LFT. | |
| [illegible] CASED TEST HOLES | LFT. | |
| [illegible] CASED DYNAMITE HOLES | LFT. | |
| [illegible] CASED DYNAMITE HOLES | LFT. | |
| [illegible] CASED DYNAMITE HOLES | LFT. | |
| GRADE "B" SPECIAL BORROW | CYS. | 14,243 |
| PAVEMENT REMOVAL | SYS. | 971 |
| SALVAGED PAVEMENT | SYS. | |
| SURFACE REMOVAL | SYS. | |
| BREAKING PAVEMENT | SYS. | |
| CURB REMOVAL | LFT. | 1040 |
| CENTER CURB REMOVAL | LFT. | |
| COMB. CURB & GUTTER REMOVAL | LFT. | |
| LIP GUTTER REMOVAL | LFT. | |
| GUTTER REMOVAL | LFT. | |
| WALK REMOVAL | SYS. | 69 |
| STEPS REMOVAL | SYS. | |
| GUARD RAIL SALVAGE | LFT. | |
| RETAINING WALL REMOVAL | LFT. | |
| RETAINING WALL REMOVAL | CYS. | |
| PAVED SIDE DITCH REMOVAL | LFT. | |
| SALVAGED ROAD MATERIAL | CYS. | |

## PAVEMENT

| ITEM | UNIT | QUANTITY |
|---|---|---|
| SUBBASE TYPE "I" OR "II" | CYS. | 11,365 |
| SALVAGED ROAD MATERIAL FOR SUBBASE | CYS. | 10,152 |
| H.E.S. PLAIN CONCRETE | SYS. | |
| REINFORCED CONCRETE 9" | SYS. | 95,569 |
| PLAIN CONCRETE | SYS. | |
| H.E.S. REINFORCED CONCRETE | SYS. | |
| PLAIN CEMENT CONCRETE FOR CROSSOVERS | SYS. | |
| BITUMINOUS MIXTURE FOR CROSSOVERS | TONS | |
| COVERING AGGREGATE | TONS | 34 |
| SUBGRADE FINE AGGREGATE | TONS | |
| COMPACTED AGGREGATE | TONS | |
| PRIVATE DRIVE PAVEMENT | SYS. | 102 |
| COMMERCIAL DRIVE PAVEMENT | SYS. | ~~613~~ 637 Rev. [illegible] |
| REINFORCING STEEL | LBS. | 7036 |
| CONTRACTION JOINTS, TYPE "D-1" | LFT. | 22,403 |
| ½" PREFORMED JOINT FILLER | LFT. | 22 |
| 1" PREFORMED JOINT FILLER | LFT. | 55 |
| 1" PREFORMED EXPANSION JOINT WITH LOAD TRANSFER | LFT. | 50 |
| 3" EXPANSION JOINT | LFT. | 96 |
| CONCRETE BASE | SYS. | |
| H.E.S. CONCRETE BASE | SYS. | |
| CONCRETE PATCHES | SYS. | |
| CONCRETE PATCHES CLASS I | SYS. | |
| CONCRETE PATCHES CLASS II | SYS. | |
| CONCRETE PATCHES CLASS III | SYS. | |
| CONCRETE PATCHES CLASS IV | SYS. | |
| CONCRETE WIDENING | SYS. | ~~2,504~~ → 2020 Rev. [illegible] |
| *CONCRETE BASE* | S.Y.S. | ~~3,010~~ → 3,583 Rev. [illegible] |
| FILLING CRACKS AND JOINTS | TONS | 0.65 |
| BITUMINOUS MATERIAL FOR UNDERSEAL | TONS | |
| DRILLING HOLES | EACH | |
| COMPACTED AGGREGATE SHOULDER | TONS | 11,482 |
| AGGREGATE FOR COMPACTED AGGREGATE BASE | TONS | 800 |
| WATER FOR COMPACTED AGGREGATE BASE | M.GALS | |
| AGGREGATE FOR SHOULDER DRAINS | TONS | |
| BITUMINOUS MATERIAL FOR PRIME | TONS | 20.42 |
| BITUMINOUS MATERIAL FOR SEAL | TONS | |
| COVERING AGGREGATE | TONS | |
| *HOT ASPHALTIC CONCRETE BINDER FOR APPROACHES* | TONS | 2,115 |
| HOT ASPHALTIC CONCRETE SURFACE TYPE "B" (1) | TONS | 1,147 |
| HOT ASPHALTIC CONCRETE BASE (2) | TONS | 2,792 |
| BITUMINOUS COATED BLENDED AGGREGATE BINDER (1) | TONS | |
| BITUMINOUS COATED BLENDED AGGREGATE SURFACE | TONS | |
| BITUMINOUS COATED AGGREGATE BINDER (1) | TONS | |
| BITUMINOUS COATED AGGREGATE SURFACE | TONS | |
| (1) INCLUDES FOR SUPERELEVATING OF CURVES & *FOR APPROACHES* | TONS | 539 |
| (2) INCLUDES FOR SUPERELEVATING OF CURVES | TONS | 1,359 |

| ITEM | UNIT | QUANTITY |
|---|---|---|
| BITUM. MIXTURE FOR APPROACHES | TONS | |
| SALVAGED ROAD MATERIAL FOR APPROACHES | CYS. | 1033 |
| BITUMINOUS SHOULDER | TONS | |
| BITUMINOUS MATERIAL FOR SEAL | TONS | |
| COVERING AGGREGATE | TONS | |
| CALCIUM CHLORIDE | TONS | 25.9 |

## MISCELLANEOUS

| ITEM | UNIT | QUANTITY |
|---|---|---|
| 6" HAND LAID RIP RAP | SYS. | |
| 12" HAND LAID RIP RAP | SYS. | |
| GROUTED RIP RAP | SYS. | |
| PLACING GROUTED RIP RAP | SYS. | |
| PLACING 6" HAND LAID RIP RAP | SYS. | |
| PLACING 12" HAND LAID RIP RAP | SYS. | |
| PRECAST CONCRETE RIP RAP | SYS. | |
| STANDARD LIP GUTTER | LFT. | |
| PAVED SIDE DITCH, TYPE "A" | LFT. | 1906 |
| PAVED SIDE DITCH, TYPE " " | LFT. | |
| PAVED SIDE DITCH, TYPE " " | LFT. | |
| INTEGRAL CONCRETE CURB | LFT. | 1960 |
| INTEGRAL CONCRETE CURB TYPE "B" | LFT. | |
| BITUMINOUS CURB | LFT. | |
| SPECIAL INTERGAL CONCRETE CURB | LFT. | 180 |
| CONCRETE CURB | LFT. | 54 |
| CONCRETE CURB TYPE "B" | LFT. | 10[illegible] Rev. [illegible] |
| CONCRETE GUTTER | LFT. | |
| COMB. CONC. CURB AND GUTTER | LFT. | |
| RECONSTRUCTED CONC. CURB | LFT. | |
| RECONSTRUCTED CONC. GUTTER | LFT. | |
| RECONSTRUCTED COMB. CONC. CURB AND GUTTER | LFT. | |
| RESET CURB | LFT. | |
| RESET COMB. CONC. CURB & GUTTER | LFT. | |
| CONCRETE CENTER CURB | LFT. | |
| CONCRETE CENTER CURB | SYS. | |
| FLEXIBLE STEEL PLATE GUARD RAIL | LFT. | |
| STEEL BEAM GUARD RAIL | LFT. | 30 |
| SHOP CURVED STEEL BEAM GUARD RAIL | LFT. | |
| DOUBLE FACE STEEL BEAM GUARD RAIL | LFT. | |
| WIRE ROPE GUARD RAIL | LFT. | |
| WOVEN WIRE FABRIC GUARD RAIL | LFT. | |
| GUARD RAIL | LFT. | |
| RESETTING FLEXIBLE STEEL PLATE GUARD RAIL | LFT. | |
| GUARD RAIL | LFT. | |
| GUARD RAIL POSTS | EA. | |
| RESETTING STEEL BEAM GUARD RAIL | LFT. | |
| RESETTING WIRE ROPE GUARD RAIL | LFT. | |
| RESET WOVEN WIRE FABRIC G. RAIL | LFT. | |
| GUARD FENCE | LFT. | |
| GUIDE POSTS, TYPE "A" | EA. | 170 |
| GUIDE POSTS, TYPE "B" | EA. | 108 |
| BARRICADES, TYPE "A" | EA. | 2 |
| BARRICADES, TYPE "B" | EA. | 17 |
| TYPICAL SIGN STANDARDS | EA. | 35 |
| RAILROAD CROSSING SIGN, TYPE "A" | EA. | |
| RAILROAD CROSSING SIGN, TYPE "B" | EA. | |
| ADVANCE RAILROAD WARNING SIGN | EA. | |
| CONCRETE HEADER | LFT. | |
| RECONSTRUCTED CONCRETE HEADER | LFT. | |
| CEMENT CONCRETE SIDEWALK | SYS. | 37 |
| RECONSTRUCTED CONCRETE SIDEWALK | SYS. | |
| CROSSWALK | SYS. | |
| RIGHT OF WAY MARKERS | EA. | 203 |
| RESET RIGHT OF WAY MARKERS | EA. | 17 |
| MONUMENTS, TYPE "D" | EA. | 8 |
| MONUMENTS, TYPE " | EA. | |
| CASTINGS ADJUSTED TO GRADE, MONUMENTS | EA. | |
| MONUMENTS, RE-ESTABLISHED | EA. | |
| BENCH MARK POSTS | EA. | |
| RESETTING BENCH MARK POSTS | EA. | |
| SODDING | SYS. | 49,818 |
| FURNISHING AND PLACING: AGGRICULTURAL LIMESTONE | TONS | 93 |
| FERTILIZER | TONS | 14 |
| SEED | LBS. | 3,239 |
| FURNISHING AND APPLYING MULCHING MATERIAL | TONS | 138 |
| PLAIN SEEDING | SYS. | |
| MULCHED SEEDING | SYS. | |
| TOP SOIL | CYS. | |
| FENCE (CHAIN LINK TYPE) | LFT. | |

## MISCELLANEOUS

| ITEM | UNIT | QUANTITY |
|---|---|---|
| | | |

## STRUCTURES

PIPE - LINEAL FEET

| ITEM | 4" | 6" | 8" | 10" | 12" | 15" | 18" | 24" | 30" | 36" | | | | | | | MIN. 2.8' | AREA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CLASS I | | | | | 390 (414 Rev. [illegible]) | 678 | 422 | 198 | 72 | | | | | | | | | |
| CLASS II | | | | | | | | | | | | | | | | | | |
| CLASS III | | | | | | | | | | | | | | | | | | |
| CLASS IV | | | | | | | | | | | | | | | | | | |
| CLASS V | | | | | | | | | | | | | | | | | | |
| CLASS VI | | | | | | | | | | | | | | | | | | |
| REINFORCED CONCRETE | | | | | | | | | | | | | | | | | | |
| VITRIFIED CLAY | | | | | | | | | | | | | | | | | | |
| CONCRETE | | | | | | | | | | | | | | | | | | |
| CORRUGATED METAL | | | | | | | | | | | | | | | | | | |
| BITUMINOUS COATED CORRUGATED METAL | | | | | 1698 | 146 | 68 | 42 | | 84 | | | | | | | | |
| SEWER | | 824 | 699 | 700 | | | | | | | | | | | | | | |
| R.C. or V.C. SEWER | | | | | | | | | | | | | | | | | | |
| DEFORMED CORRUGATED METAL | | | | | | | | | | | | | | | | | | |
| CLASS 9 | | | | | | | | | | | | | | | | | 54 | |
| R.C., V.C. or Conc. Pipe | | | | | 6' | | | | | | | | | | | | | |
| DRAIN TILE | | 800 | 600 | 400 | | | | | | | | | | | | | | |
| R.C., V.C., C.I., or Conc. Pipe | | | | | 267 | | | | | | | | | | | | | |

### SUBSURFACE DRAINAGE

| PIPE - LINEAL FEET | | AGG.-CU. YDS. |
|---|---|---|
| 6" CLASS VII | 21,864 | 2175 |

### CASTINGS ADJUSTED TO GRADE

| EACH |
|---|
| 10 |

### FOR STRUCTURES

| ITEM | UNIT | QUANTITY |
|---|---|---|
| CONCRETE CLASS "D" | CYS. | 90.36 |
| REINFORCING STEEL | LBS. | |

### AUTO. DRAINAGE GATES

| SIZE | HEAD | EACH |
|---|---|---|
| | | |

### CATCH BASINS

| TYPE | EACH |
|---|---|
| "C-5" | 3 |

### PIPE CATCH BASIN

| SIZE | EACH |
|---|---|
| 12" | |
| 15" | |
| 18" | |
| 24" | |

### INLETS

| TYPE | EACH |
|---|---|
| "A-8" | 6 |
| SPL. "A-8" | 2 |

### MANHOLES

| TYPE | EACH |
|---|---|
| A-4 | 2 |
| B-4 | 1 |

### RECONSTRUCTED

| TYPE | LIN. FT. |
|---|---|
| MANHOLE | 17 |
| CATCH BASIN | |
| INLET | |
| R.C. SPRING BOX | |

### MANHOLE RING & COVER

| TYPE | EACH |
|---|---|
| 4 | 2 |