FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	1	149

SECTION:-"C"

INDEX

SHEET NO.	1	TITLE SHEET.
SHEET NO.	2-3	STANDARD CROSS SECTIONS. (C-11-FR April 10, 1935) (C-11-GB Jan. 8, 1935)
SHEET NO.	4-6	TYPICAL CROSS SECTIONS.
SHEET NO.	7	STD. EXPANSION JOINTS. Jan. 7, 1935
SHEET NO.	8	STD. PAVEMENT JOINTS. Jan. 7, 1935
SHEET NO.	9-26	PLAN AND PROFILE.
SHEET NO.	27-28	BRIDGE AND CULVERT DATA—ESTIMATE OF QUANTITIES.
SHEET NO.	29-30	MISCELLANEOUS STANDARDS. (SHEET "A" Feb. 1935) (SHEET "B" Feb. 1935)
SHEET NO.	31-32	MISCELLANEOUS STANDARDS. (SHEET "C" May 9, 1935) (SHEET "D" Feb. 1935)
SHEET NO.	33	STD. REINF. CONC. BOX CULVERT. Jan. 11, 1935
SHEET NO.		STD. REINF. CONC. CULV.—SLAB TOP TYPE WITHOUT FILL (10'-0" TO 18'-0" SPAN)
SHEET NO.	34	STD. REINF. CONC. CULV.—SLAB TOP TYPE UNDER FILL 1'-0" TO 5'-0" (10'-0" TO 20'-0" SPAN) Jan. 30, 1934
SHEET NO.		STD. REINF. CONC. CULV.—SLAB AND GIRDER WITHOUT FILL (20'-0" SPAN)
SHEET NO.		STD. REINF. CONC. CULV.—SLAB TOP TYPE WITHOUT FILL (10'-0" TO 20'-0" SPAN) 15° SKEW.
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 (5'-0" TO 10'-0" SPAN) GRAVITY TYPE.
SHEET NO.		STD. REINF. CONC. CULV.—SLAB TOP TYPE (12'-0" TO 20'-0" SPAN) GRAVITY TYPE.
SHEET NO.	36	STD. FLEXIBLE STEEL PLATE GUARD RAIL. May 1935
SHEET NO.		STD. RAILROAD GRADE CROSSING.
SHEET NO.	35	STD. STRUCTURE CONNECTIONS FOR EXTENSIONS May 1934
SHEET NO.	35-A	STD. CONC. SLAB R. R. CROSSING Rev. Oct. 8, 1934
SHEET NO.	35-B	ALTERNATE CONC. SLAB R. R. CROSSING Rev. Oct. 29, 1934
SHEET NO.		
SHEET NO.		STD. PLAN FOR FILLING IN PEAT MARSHES.
SHEET NO.	37	DATA FOR SUPER-ELEVATING AND WIDENING OF CURVES. Sept. 1932
SHEET NO.	38	STD. DETOUR SIGNS. Feb. 14, 1935
SHEET NO.	39-149	CROSS SECTIONS.

STATE OF INDIANA

STATE HIGHWAY COMMISSION

PLAN AND PROFILE OF PROPOSED

STATE HIGHWAY

F. A. PROJECT NO. 181 SEC. 'C' (1936)

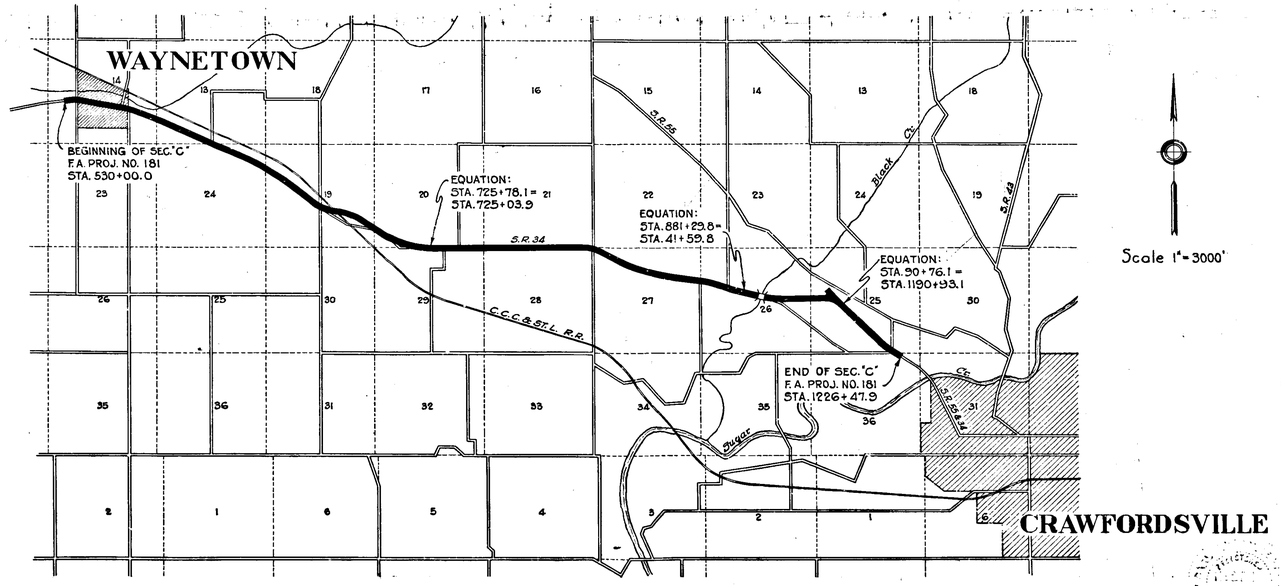
VEEDERSBURG — CRAWFORDSVILLE ROAD

BEGINNING ON S.R. 34 APPROXIMATELY 762 FT. WEST OF THE WEST CORPORATION LINE OF WAYNETOWN AND EXTENDING IN A SOUTHEASTERLY DIREGTION TO THE CONGRETE PAVEMENT IN PLACE AT THE INTERSECTION OF S.R. 34 AND S.R. 55, IN SEC. 36, T. 19 N., R. 5 W., IN MONTGOMERY COUNTY.

GROSS LENGTH:- 8.270 MI.
NET LENGTH:- 8.229 MI.

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

MAX. GRADE = 6.998 %



Scale 1" = 3000'

DATE	REVISION	SHEET NO.
11-21-35	R/W	11 to 16, 18 & 20
1-13-36	R/W	10
2-28-36	R/W	19
4-10-36	R/W	13 & 14
5-22-36	Intersection	22-23A-26
7-29-37	R/W	10

APPROVED AND ADOPTED 9-26-35
BY STATE HIGHWAY COMMISSION OF INDIANA
James D. Adams
CHAIRMAN-STATE HIGHWAY COMMISSION OF INDIANA

APPROVED 9-26-35
M. McCarty
CHIEF ENGINEER-STATE HIGHWAY COMMISSION OF INDIANA

RECOMMENDED FOR APPROVAL
[redacted]
DISTRICT ENGINEER-BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL
[redacted]
UNIT ENGINEER-BUREAU OF PUBLIC ROADS

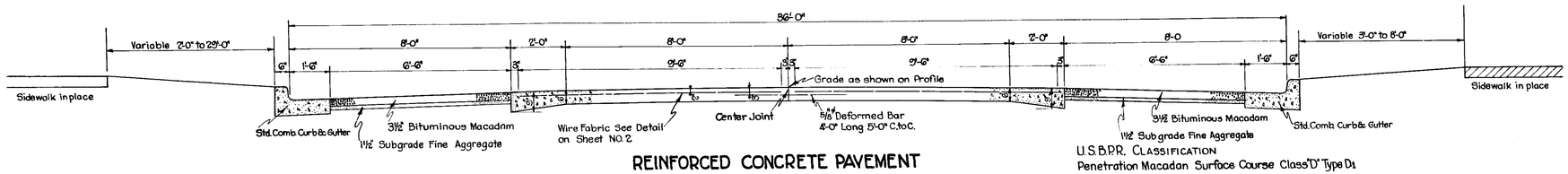
APPROVED
[redacted]
CHIEF BUREAU OF PUBLIC ROADS

STATE HIGHWAY COMMISSION OF INDIANA.
STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION.
DATED MARCH, 1935. AND ADDENDUM NO. 1, ON FILE WITH U.S. BUREAU OF PUBLIC ROADS TO BE USED WITH THESE PLANS.

Printed on Weber No. 127 Tracing Cloth
Underwood Blue Print & Lithograph Co.

FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND	181	1936	4	149

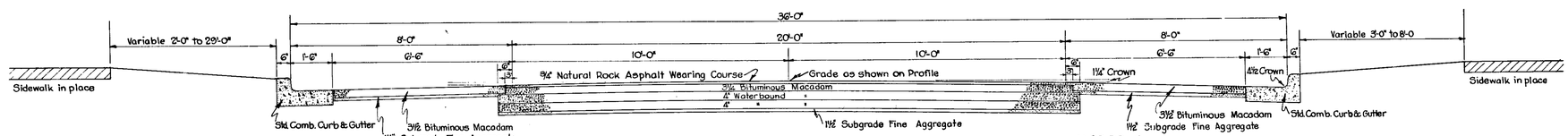
SECTION-"C"



REINFORCED CONCRETE PAVEMENT

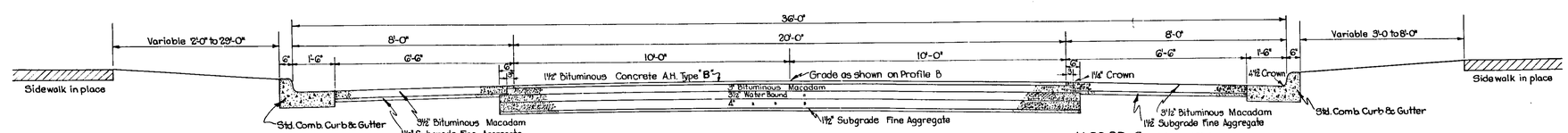
U.S.B.P.R. CLASSIFICATION
Penetration Macadam Surface Course Class "D" Type D1

Wire Fabric Reinforcing Mat to be the same Length, Spacing and Gauge as shown for Standard Cross Section.



NATURAL ROCK ASPHALT ON MACADAM BASE

U.S.B.P.R. CLASSIFICATION
Rock Asphalt Surface Course Class G-Type G-1
Penetration Macadam Binder Course Class D Type D-1
Penetration Macadam Surface Course Class D Type D-1



BITUMINOUS CONCRETE A.H. ON MACADAM BASE

STA. 530+00 TO STA. 543+45 STA. 549+24 TO STA. 562+29

U.S.D.P.R. CLASSIFICATION
Hot Asphalt Concrete Surface Course Class I Type I1
Penetration Macadam Binder Course Class D Type D-1
Penetration Macadam Surface Course Class D Type D-1

NOTE:- Where the new construction follows along an old gravel or Stone road, that portion of traffic bound metal within the limits of the required water bound macadam base course maybe substituted for same, the remaining thickness to be built up in accordance with the specifications for new waterbound macadam base course.
The total thickness of traffic bound metal and waterbound macadam shall not be less than the thickness of the waterbound courses.

Wherever, in the construction of the subgrade, material is encountered which in the opinion of the Engineer may be substituted for "Subgrade Fine Aggregate," that item shall be omitted from that portion of the Contract

TYPICAL CROSS SECTIONS

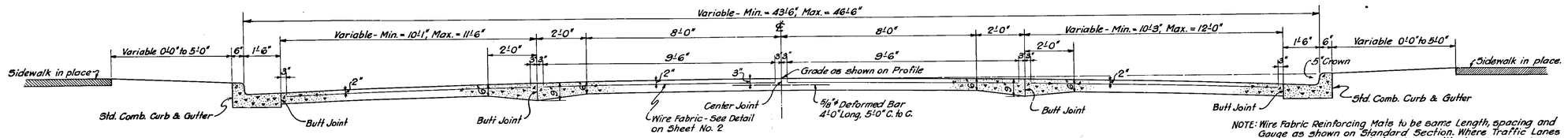
Scale:- ½"=1'-0"

APPROVED James D Adams
CHAIRMAN STATE HIGHWAY COMMISSION OF INDIANA

APPROVED M K Reef
CHIEF ENGINEER STATE HIGHWAY COMMISSION OF INDIANA

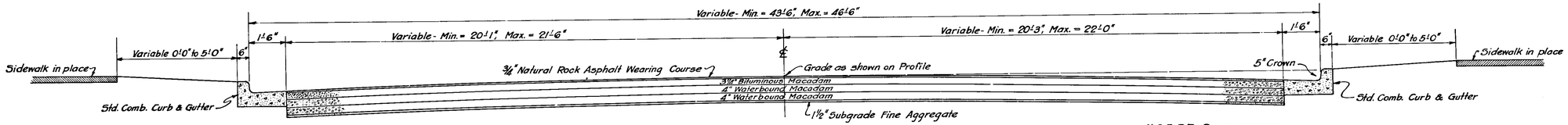
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	5	149

SECTION-"C"



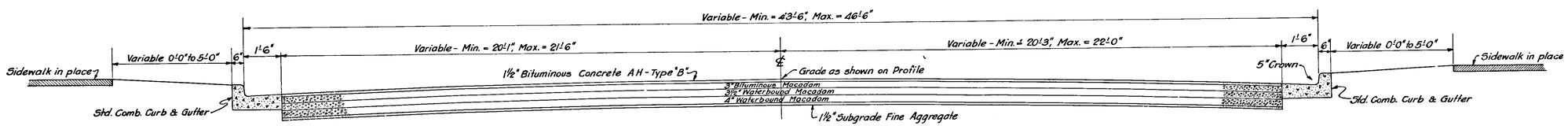
REINFORCED CONCRETE PAVEMENT

NOTE: Wire Fabric Reinforcing Mats to be same Length, spacing and Gauge as shown on Standard Section. Where Traffic Lanes are greater than ten(10) feet in width the Wire Fabric may be lapped Longitudinally and such lap shall be not less than 6".



NATURAL ROCK ASPHALT ON MACADAM BASE

U.S.B.P.R. CLASSIFICATION
Rock Asphalt Surface Course, Class G - Type G1
Penetration Macadam Binder Course, Class D - Type D1
Penetration Macadam Surface Course, Class D-Type D1



BITUMINOUS CONCRETE A H ON MACADAM BASE

STA. 543+45 TO STA. 549+24

U.S.B.P.R. CLASSIFICATION
Hot Asphalt Concrete Surface Course, Class I - Type I1
Penetration Macadam Binder Course, Class D - Type D1
Penetration Macadam Surface Course, Class D-Type D1

NOTE: Where the new construction follows along an old gravel or stone road, that portion of traffic bound metal within the limits of the required waterbound macadam base course may be substituted for same, the remaining thickness to be built up in accordance with the specifications for new waterbound macadam base course. The total thickness of traffic bound metal and waterbound macadam shall not be less than the thickness of the waterbound courses.

Wherever, in the construction of the subgrade, material is encountered which in the opinion of the Engineer may be substituted for "Subgrade Fine Aggregate," that item shall be omitted from that portion of the contract.

TYPICAL CROSS SECTIONS

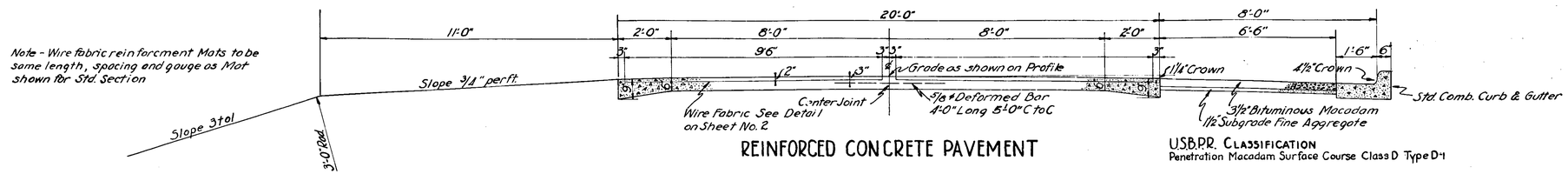
Scale - 1/2" = 1'-0"

APPROVED: James D. Adams
CHAIRMAN, STATE HIGHWAY COMMISSION OF INDIANA

APPROVED: mc Keep
CHIEF ENGINEER: STATE HIGHWAY COMMISSION OF INDIANA

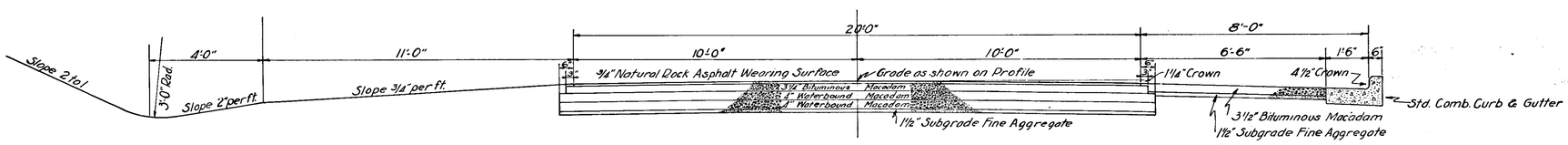
FEDERAL ROAD DISTRICT NO.	STATE	FED.AID PROJ.NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	6	149

SECTION "C"



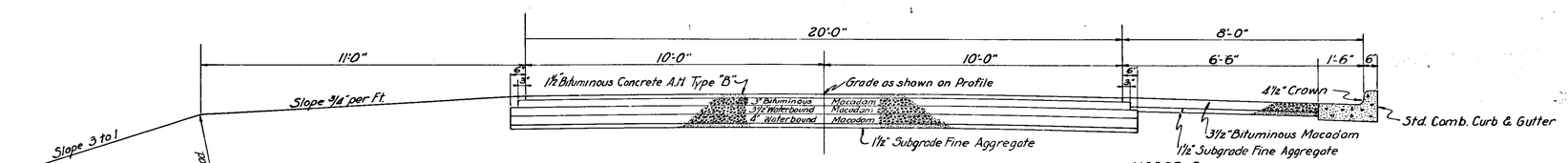
REINFORCED CONCRETE PAVEMENT

U.S.B.P.R. CLASSIFICATION
Penetration Macadam Surface Course Class D Type D-1



NATURAL ROCK ASPHALT ON MACADAM BASE

U.S.B.P.R. CLASSIFICATION
Rock Asphalt Surface Course Class G Type G-1
Penetration Macadam Binder Course Class D - Type D-1
Penetration Macadam Surface Course Class D - Type D-1



BITUMINOUS CONCRETE A.H. ON MACADAM BASE

Sta. 562 + 29 to Sta. 564 + 12

U.S.B.P.R. CLASSIFICATION
Hot Asphalt Concrete Surface Course Class I - Type I-1
Penetration Macadam Binder Course Class D-Type D-1
Penetration Macadam Surface Course Class D - Type D-1

NOTE Where the new construction follows along an old gravel or stone road, that portion of traffic bound metal within the limits of the required waterbound macadam base course may be substituted for same, the remaining thickness to be built up in accordance with the specifications for new waterbound macadam base course.
The total thickness of traffic bound metal and waterbound macadam shall not be less than the thickness of the waterbound courses

Wherever, in the construction of the subgrade, material is encountered which in the opinion of the Engineer may be substituted for "Subgrade Fine Aggregate", that item shall be omitted from that portion of the contract.

TYPICAL CROSS SECTIONS

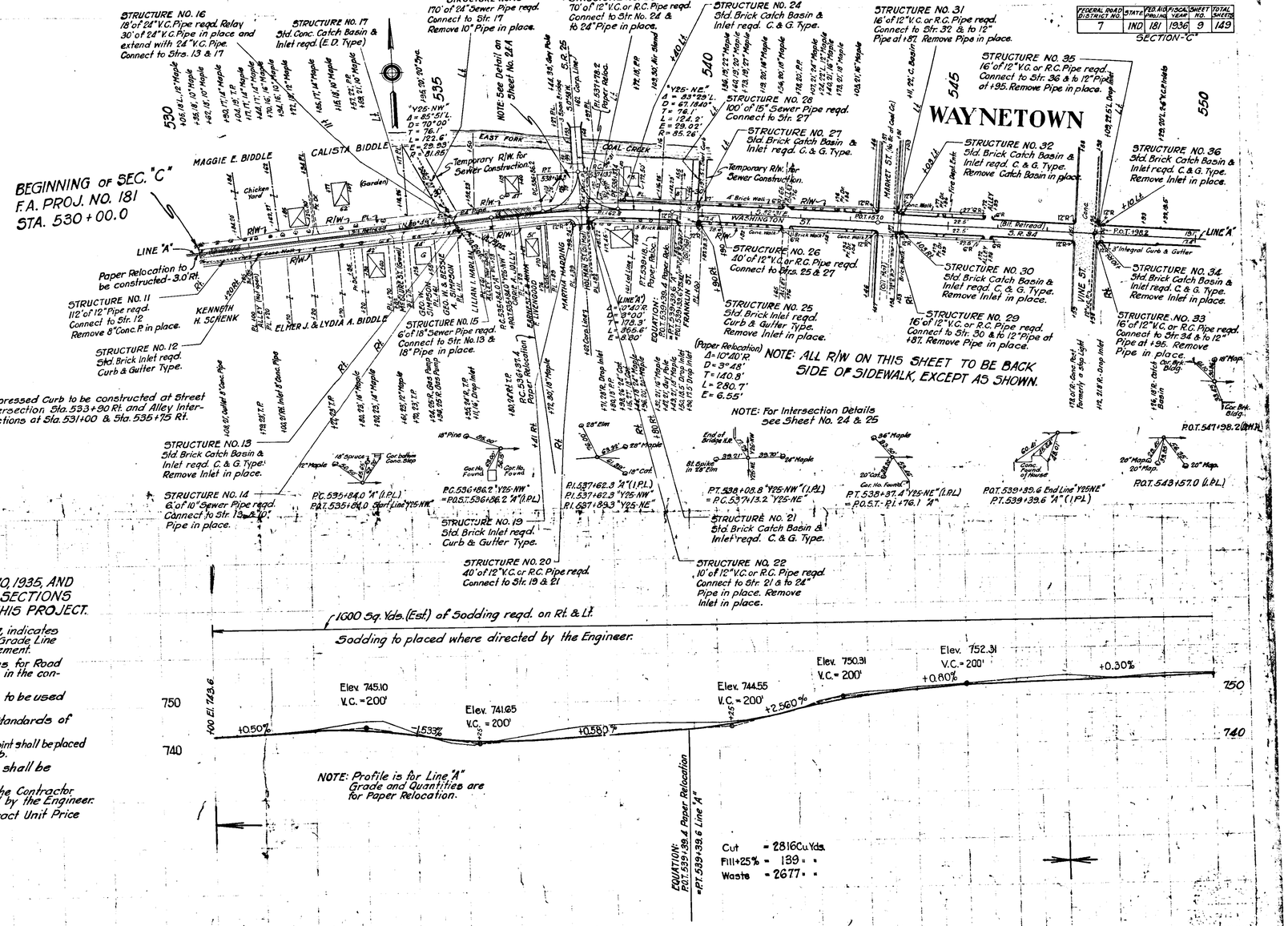
Scale 1/2" = 1'-0"

APPROVED James D. Adams
CHAIRMAN STATE HIGHWAY COMMISSION OF INDIANA

APPROVED M. K. Leffler
CHIEF ENGINEER STATE HIGHWAY COMMISSION OF INDIANA

FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND	181	1936	9	149

SECTION-"C"



NOTE: STANDARD CROSS SECTIONS C-11-FR, DATED APRIL 10, 1935, AND C-11-GB, DATED JAN. 8, 1935, AND TYPICAL CROSS SECTIONS AS SHOWN ON SHEETS 4, 5 & 6 TO BE USED ON THIS PROJECT.

Grade Line, as shown on Profile from Sta. 530+00 to Sta. 563+67, indicates Top of Finished Pavement. From Sta. 563+67 to Sta. 1226+47.9 Grade Line shall be raised 3" for Rock Asphalt or Bituminous Concrete Pavement.

State Highway Commission of Indiana Standard Specifications for Road Construction, dated March 1935 and Addendum No. 1 shall apply in the construction of this Project.

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

All Curves of 5° and over will be widened according to Standards of 1932. The Crown will be taken out of all Curves over 2°.

At Street or Alley Intersections ½" Preformed Expansion Joint shall be placed between abutting Concrete Sidewalk and back of new Curb.

The Top of all Castings coming within Pavement limits shall be set ¼" below proposed surface.

At all Road Approaches, where Material is required the Contractor shall salvage that Portion of Material in place as directed by the Engineer.

All Brick Crosswalk Removal to be paid for at the Contract Unit Price for Excavation.

D.A. Gunder 3-35
R.W. Brewer 5-35

P. Stohner 6-35

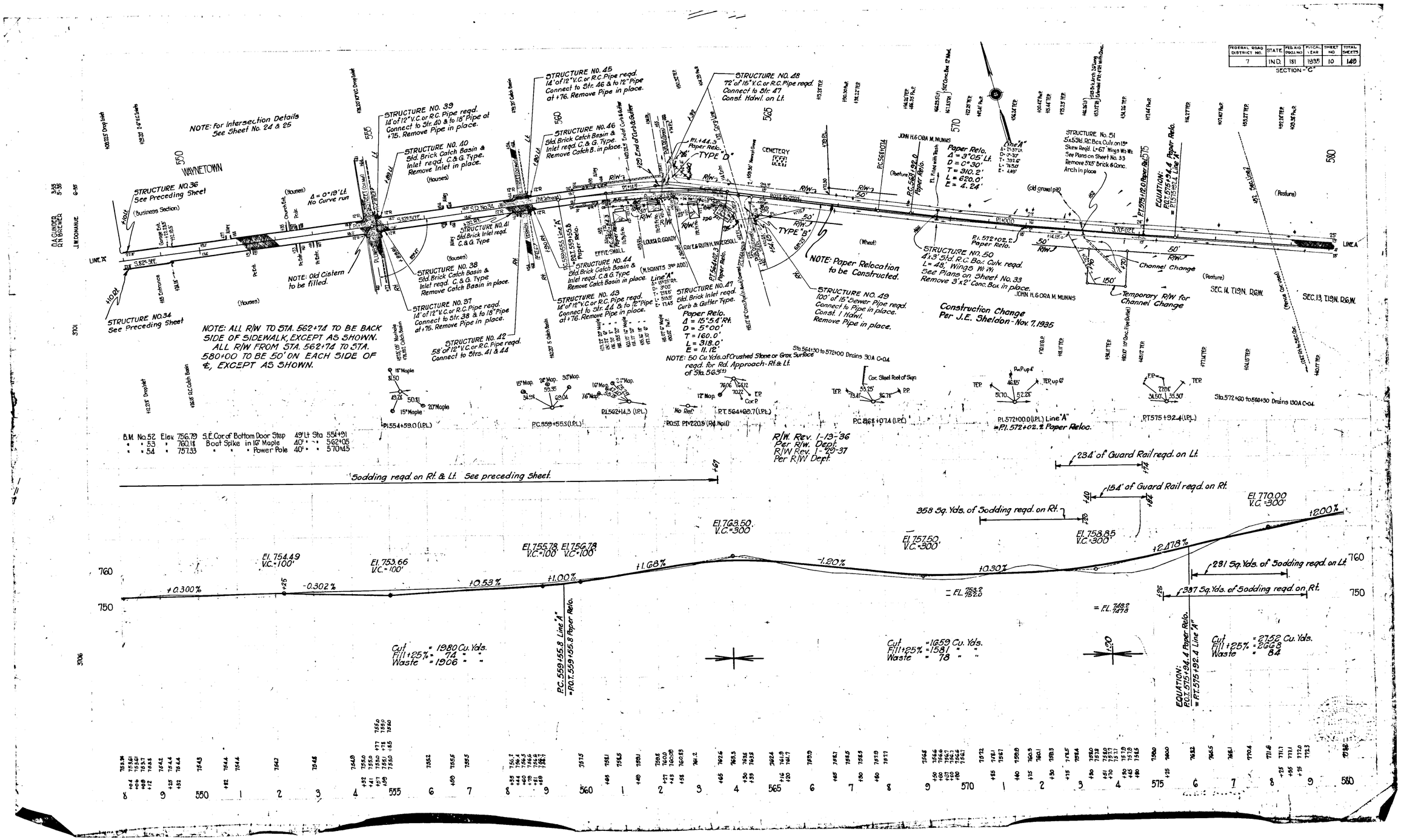
3-35
5-35

D.A. Gunder
R.W. Brewer

3706

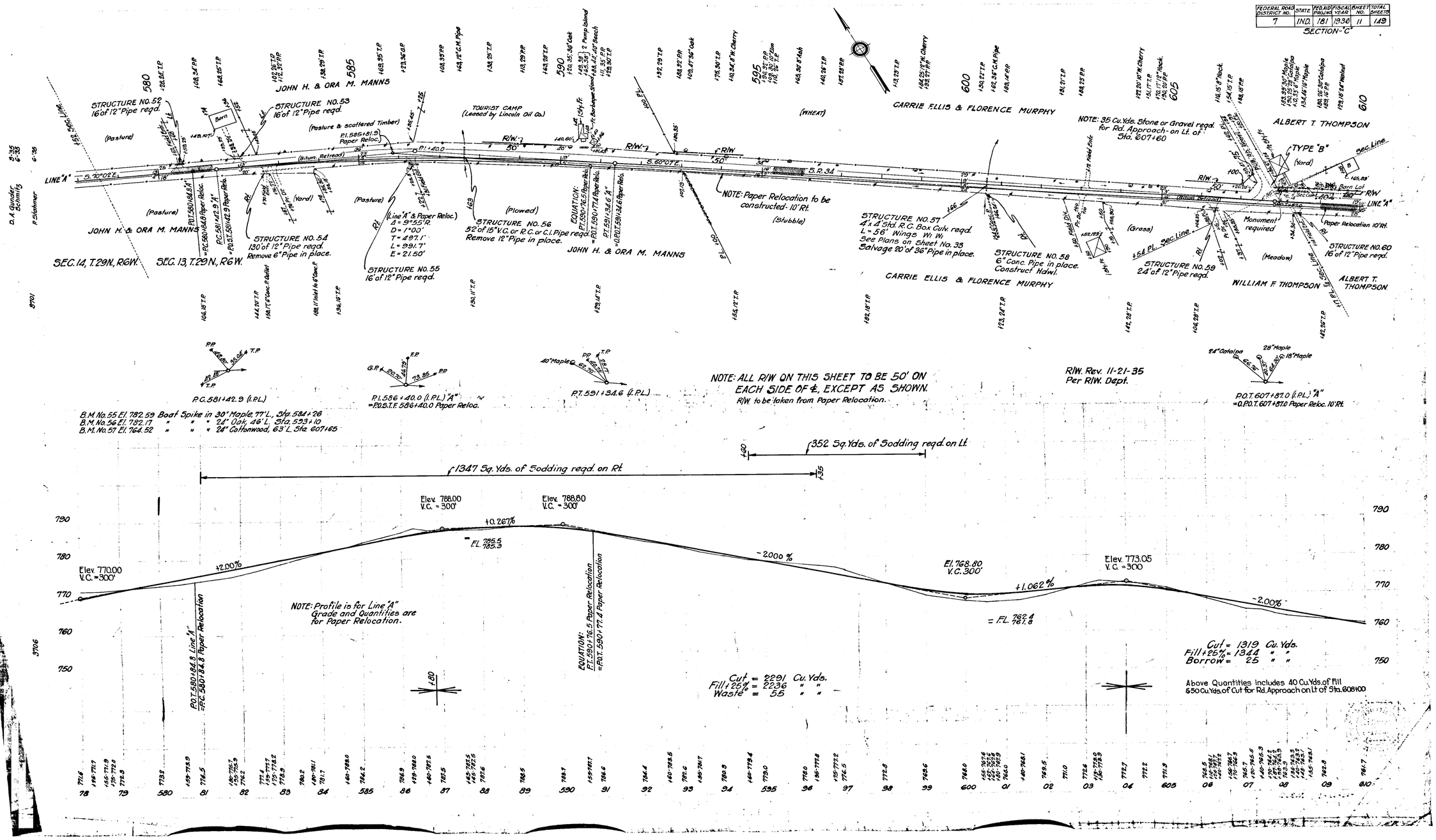
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1935	10	149

SECTION "C"



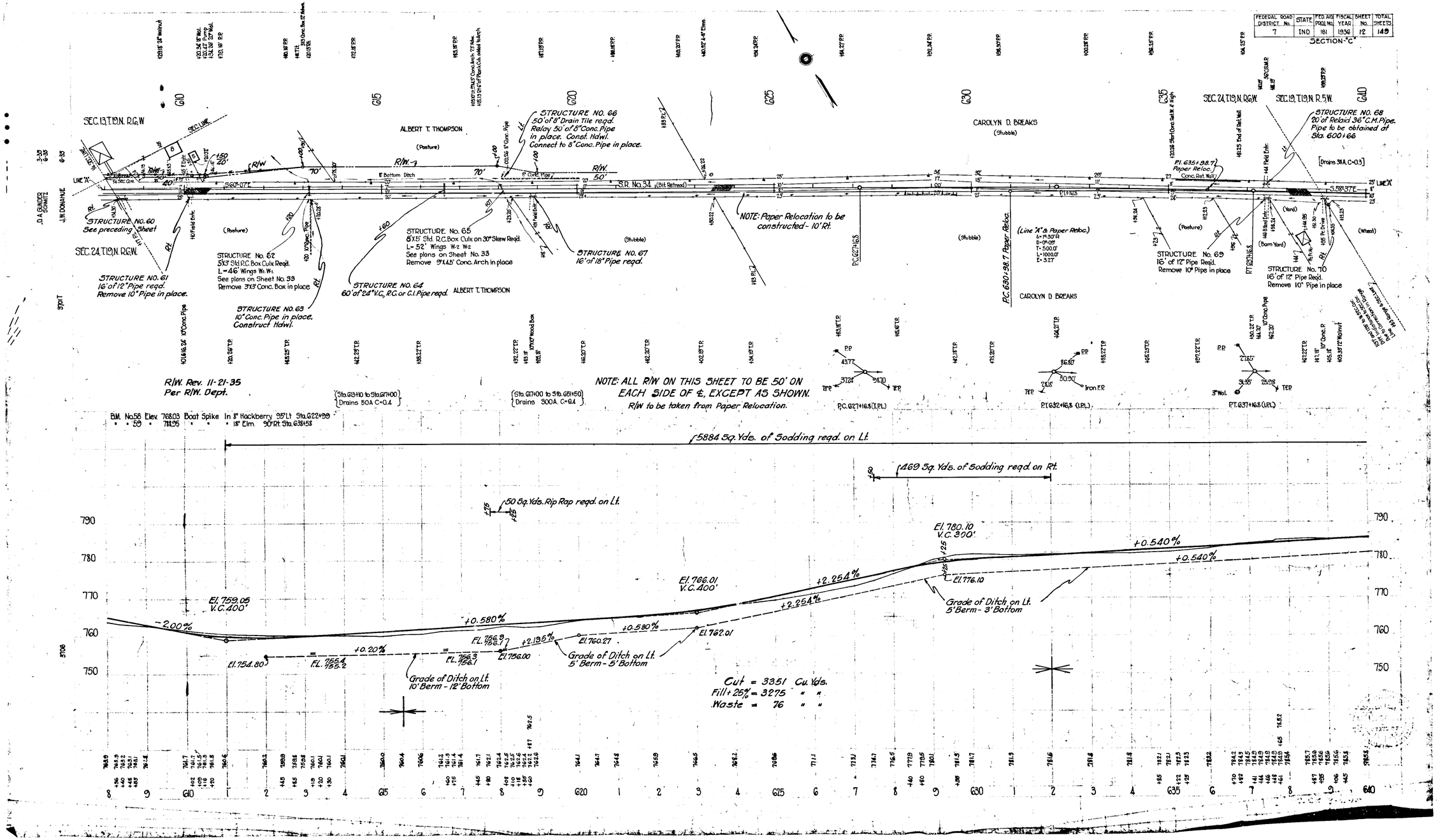
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	11	149

SECTION-"C"



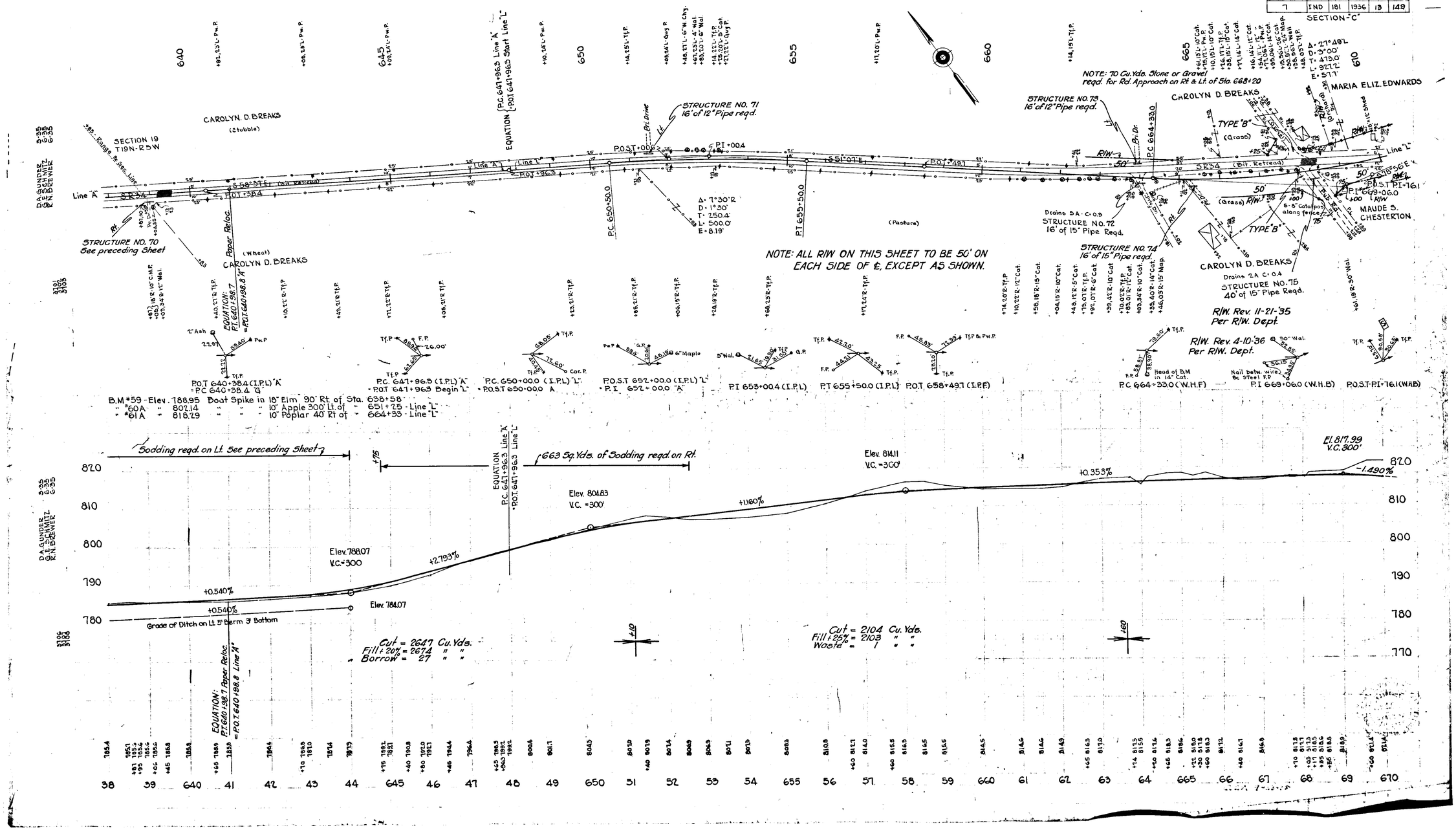
FEDERAL ROAD DISTRICT No.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
7	IND	181	1936	12	149

SECTION "C"



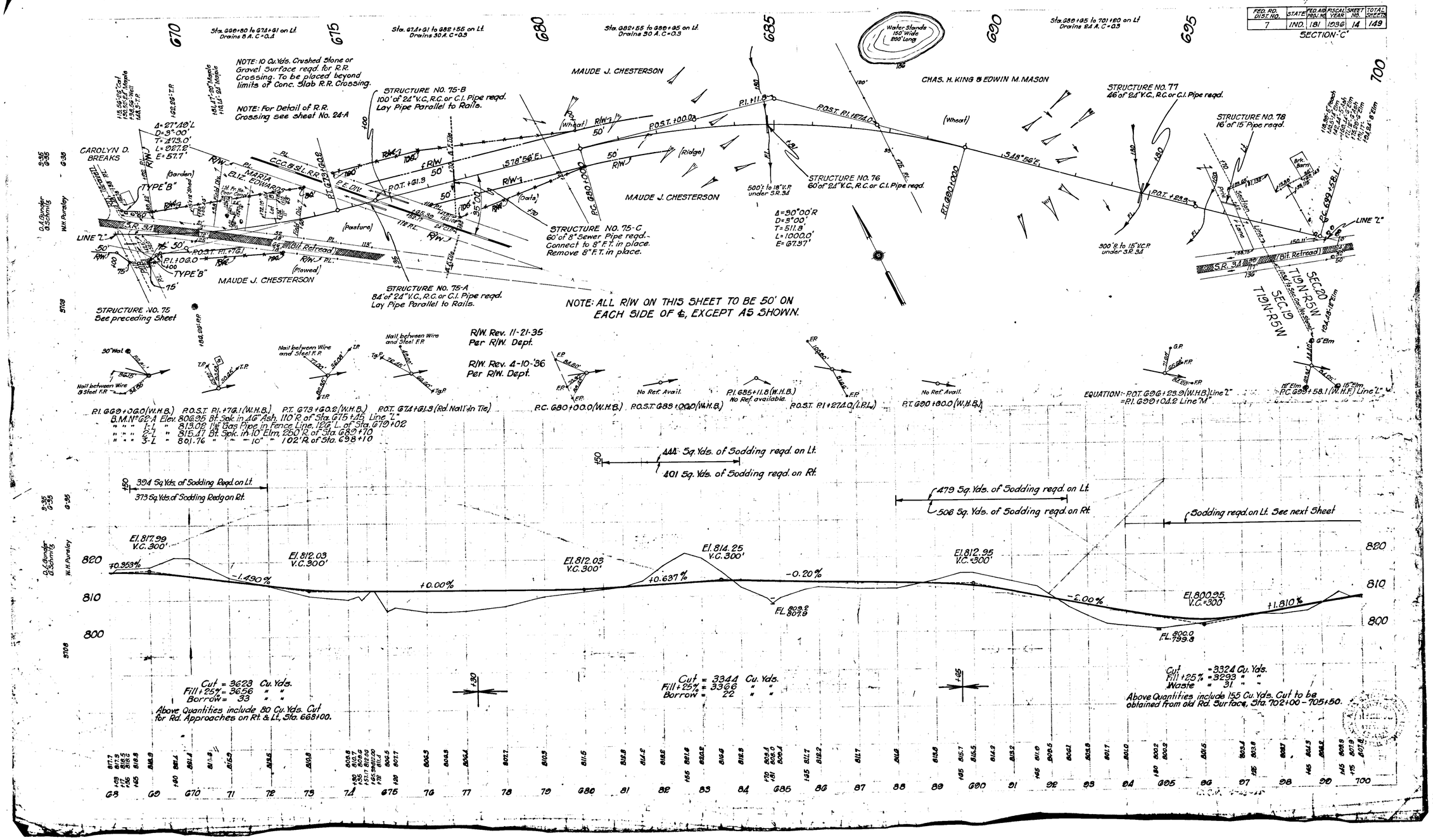
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND	181	1936	13	149

SECTION "C"



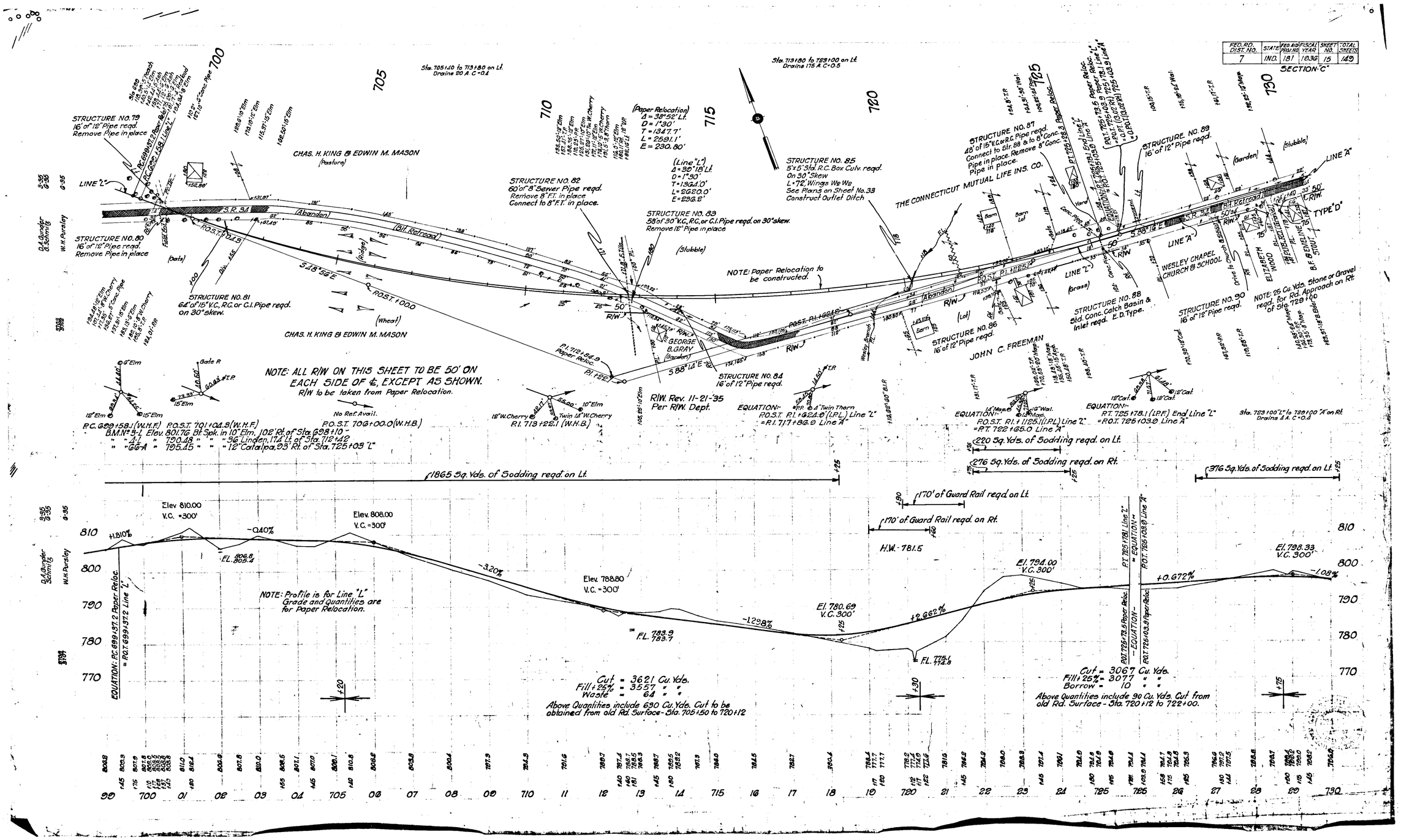
FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	14	149

SECTION-"C"



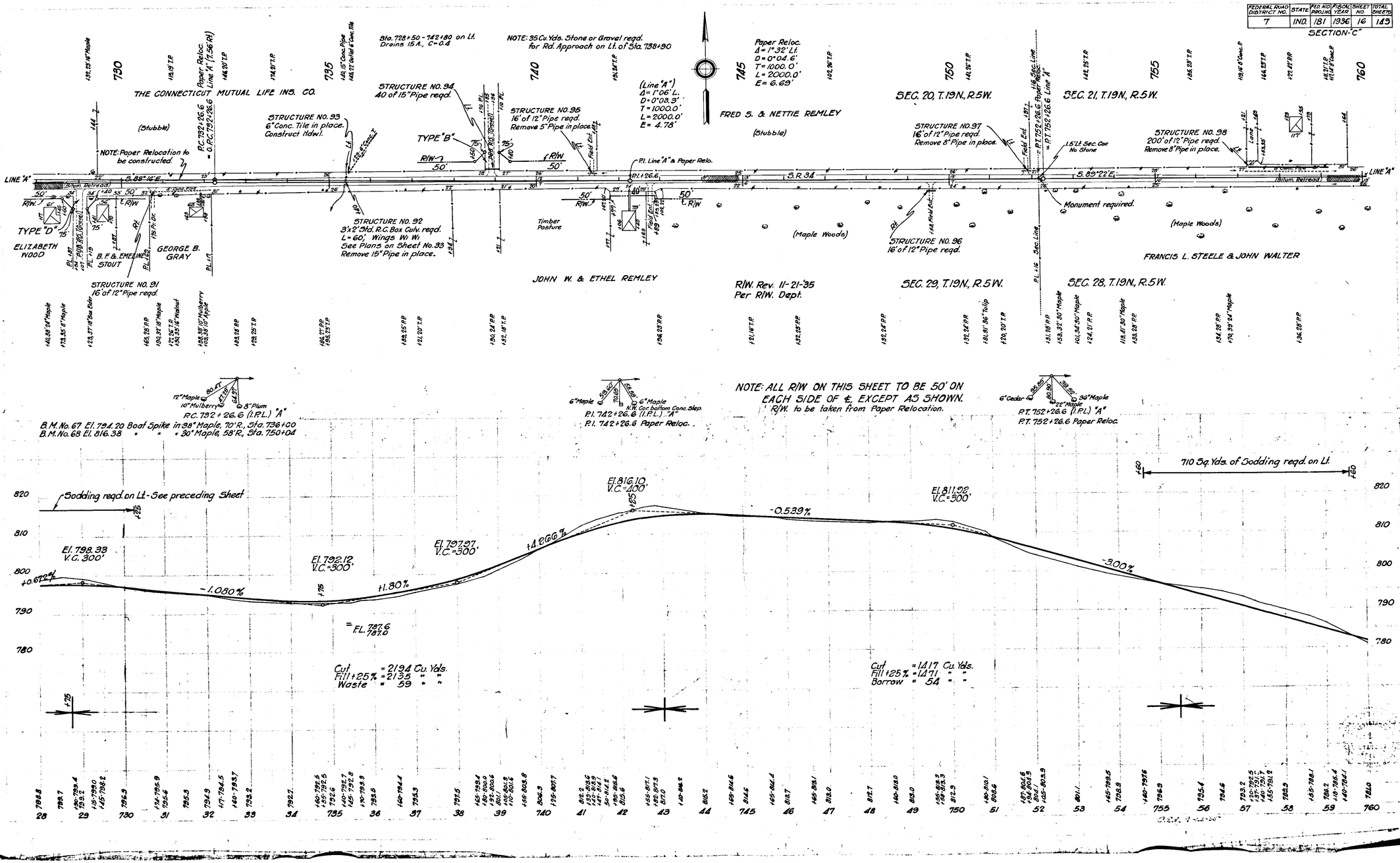
FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	15	149

SECTION "C"



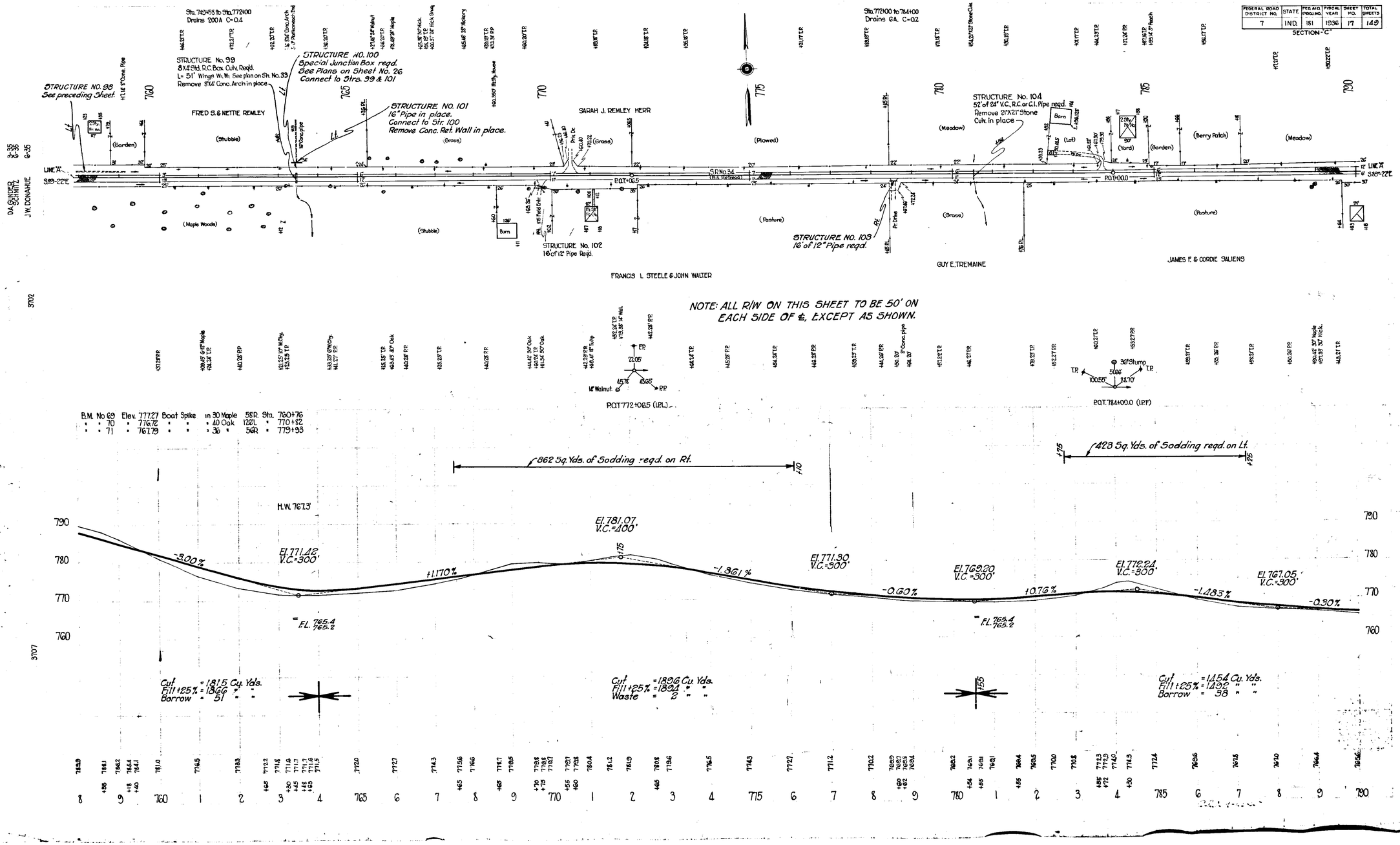
FEDERAL ROAD DISTRICT NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	16	149

SECTION-"C"



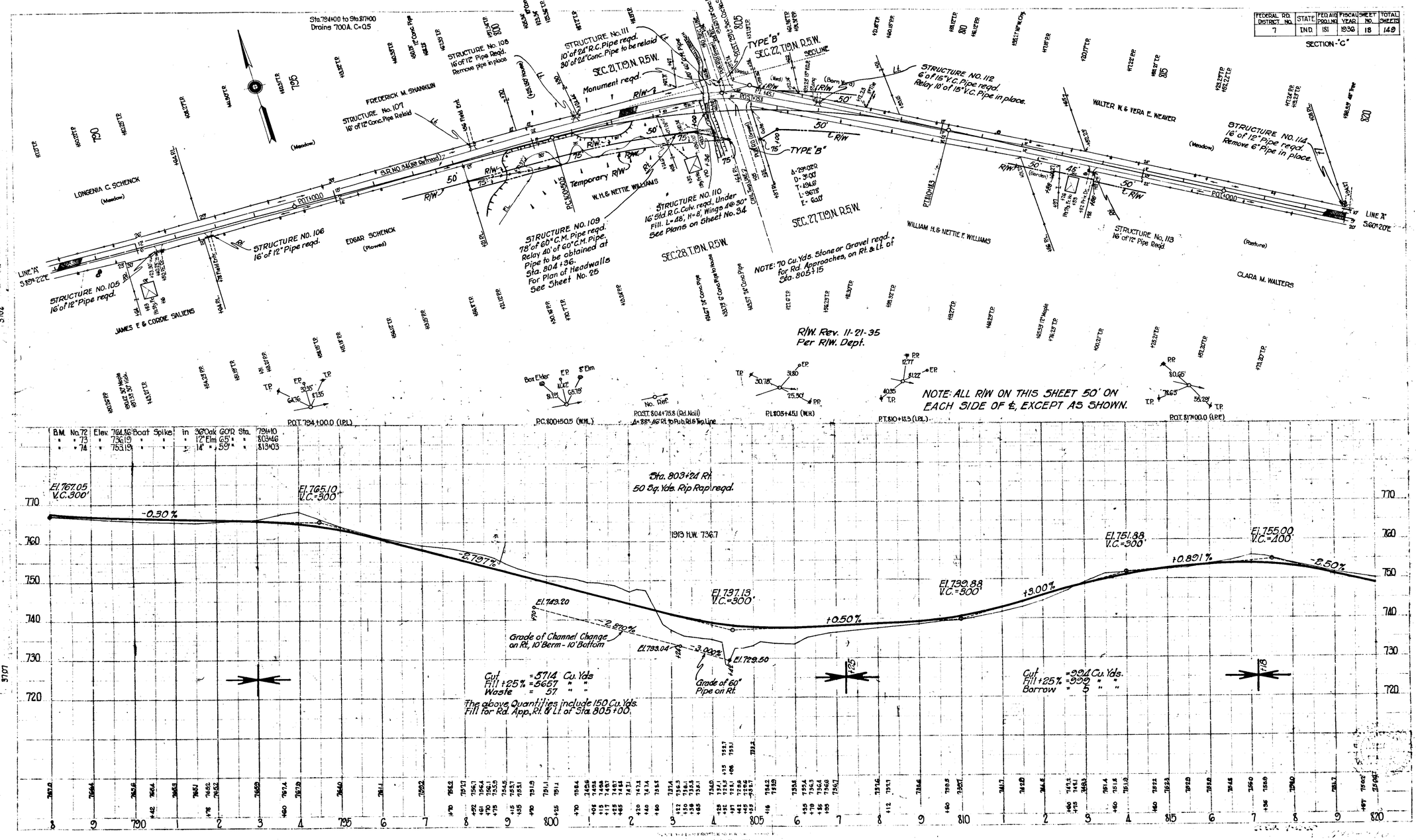
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	17	149

SECTION "C"



FEDERAL RD. DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	151	1936	18	149

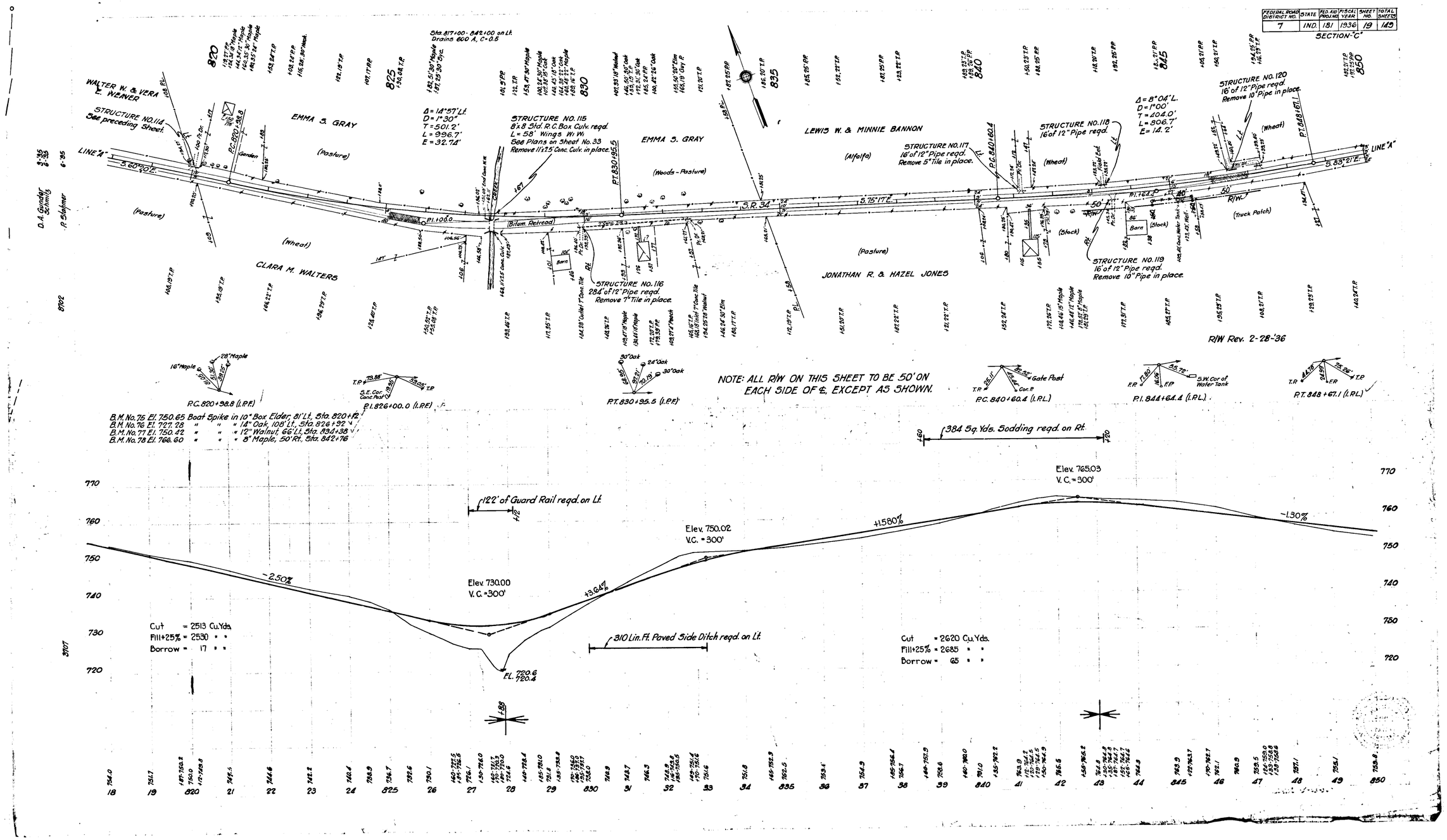
SECTION - "C"



DA. GUNDER 3-35
SCHMITZ 6-35
J.W. DONAHUE 6-35
3702
3707

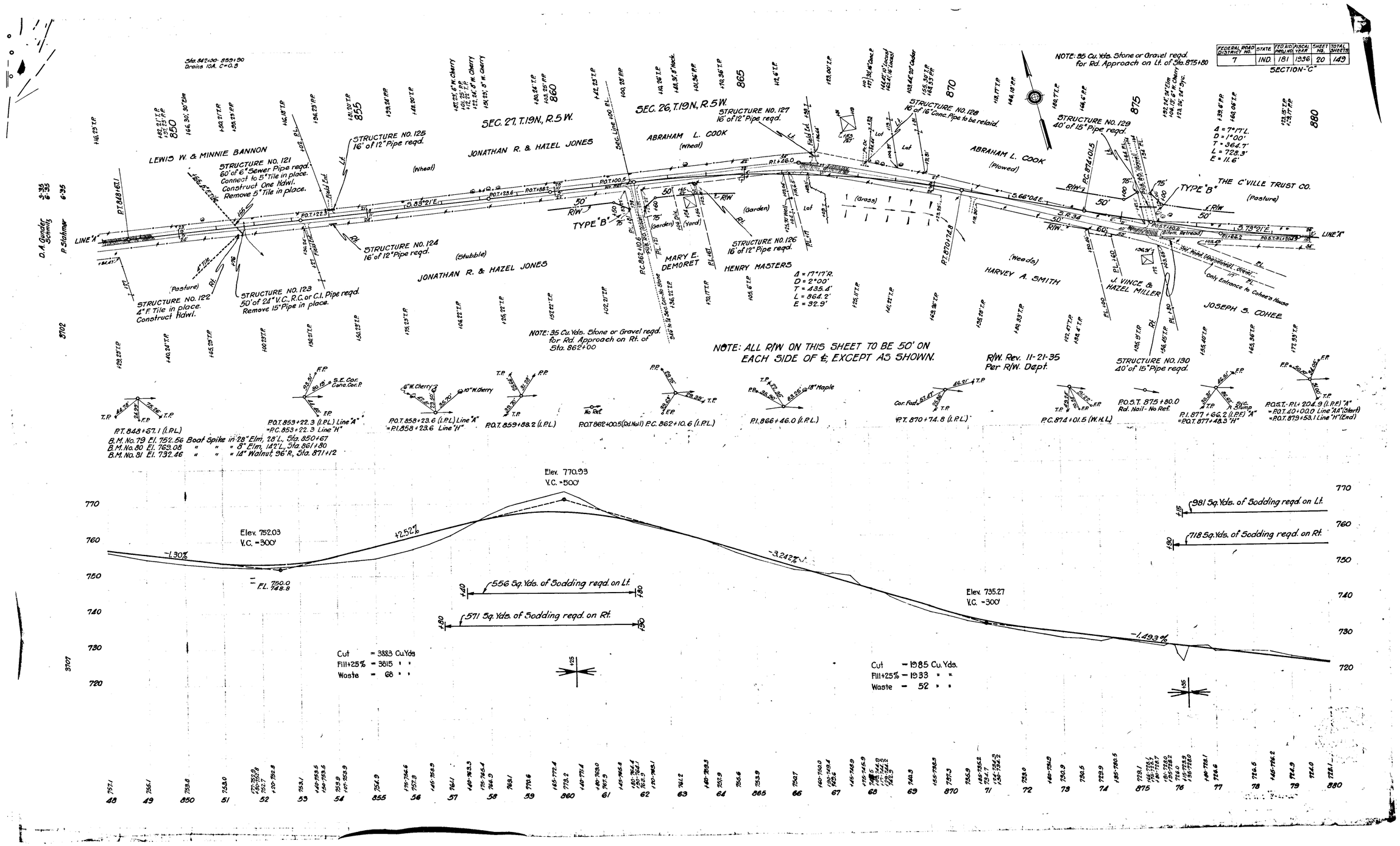
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	19	149

SECTION-"C"



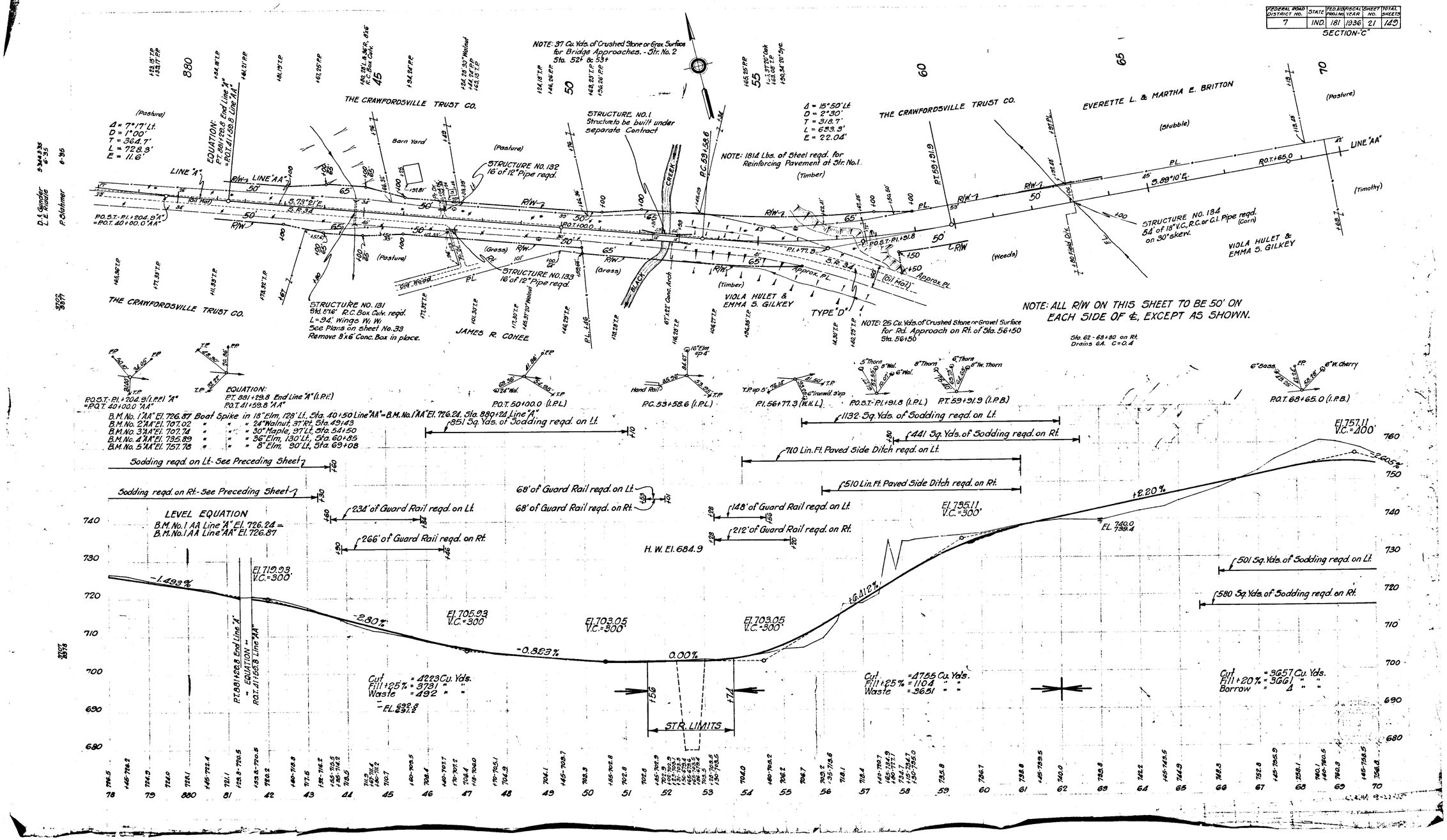
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	20	149

SECTION-"C"



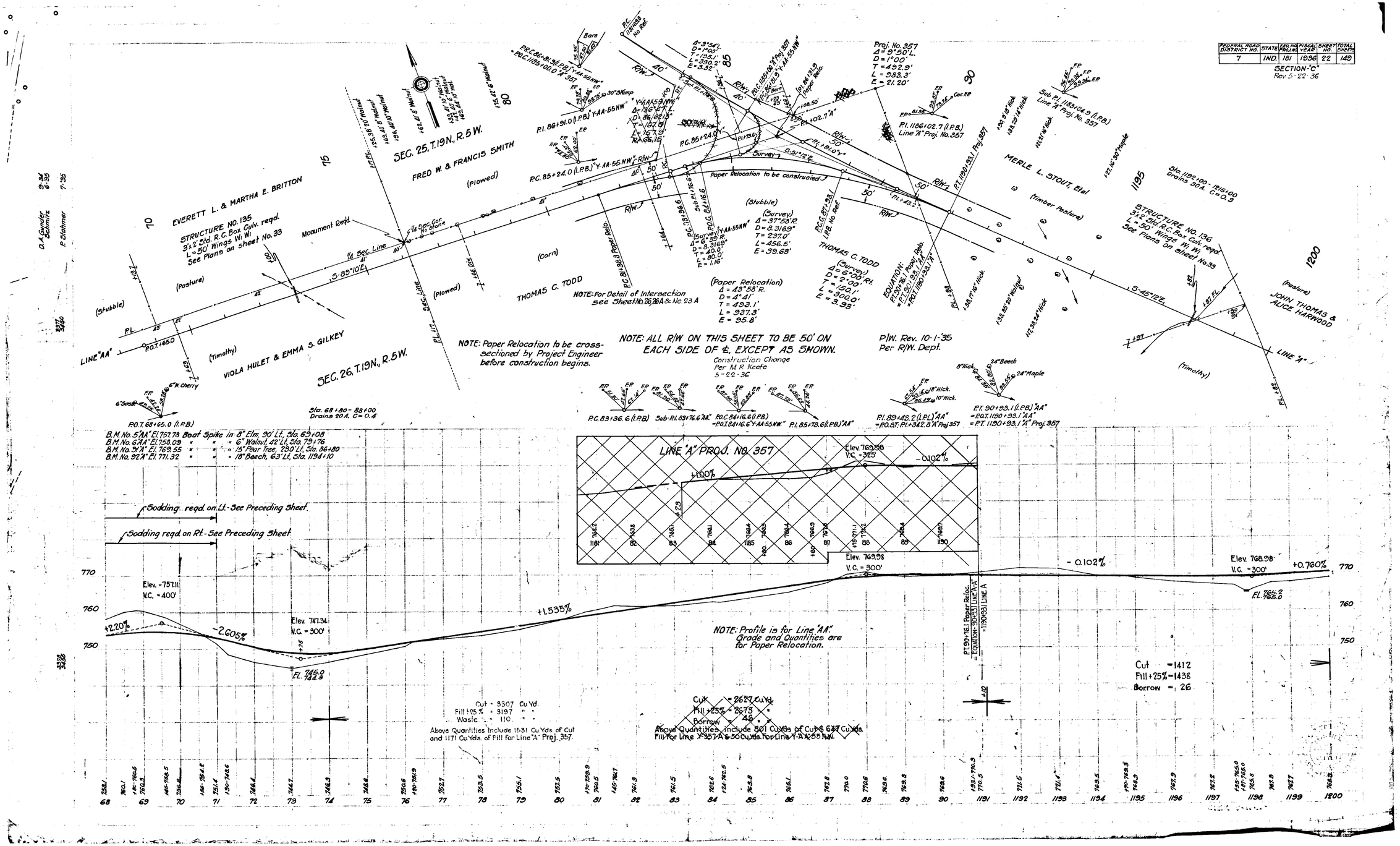
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	21	149

SECTION-C



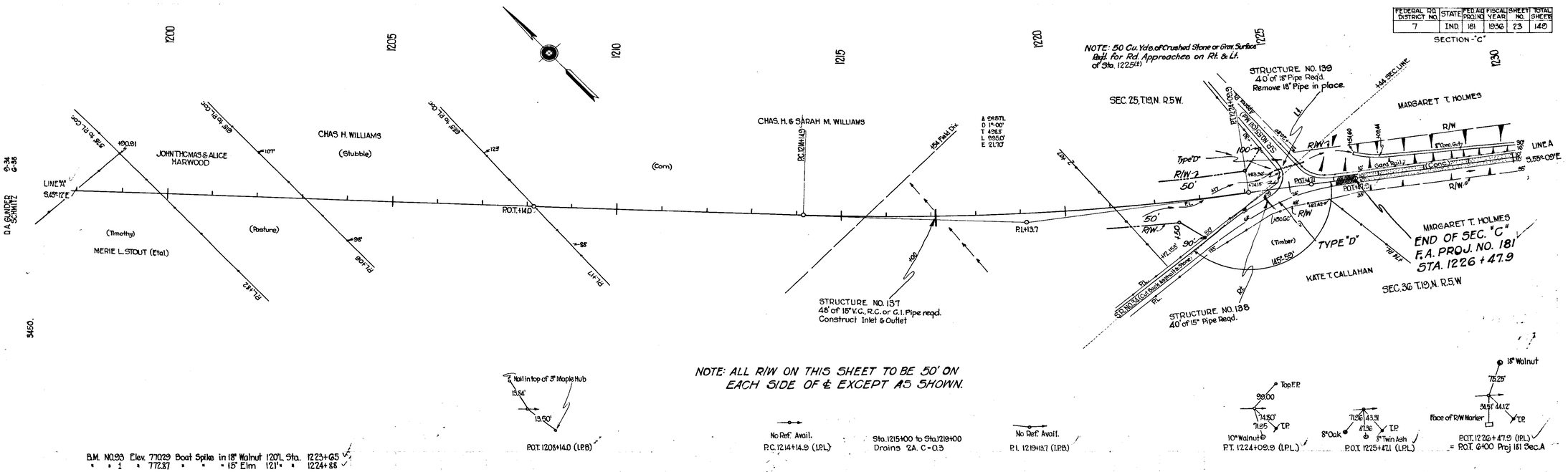
FEDERAL ROAD DISTRICT NO.	STATE	FED. RD. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	22	149

SECTION "C"
Rev. 5-22-36



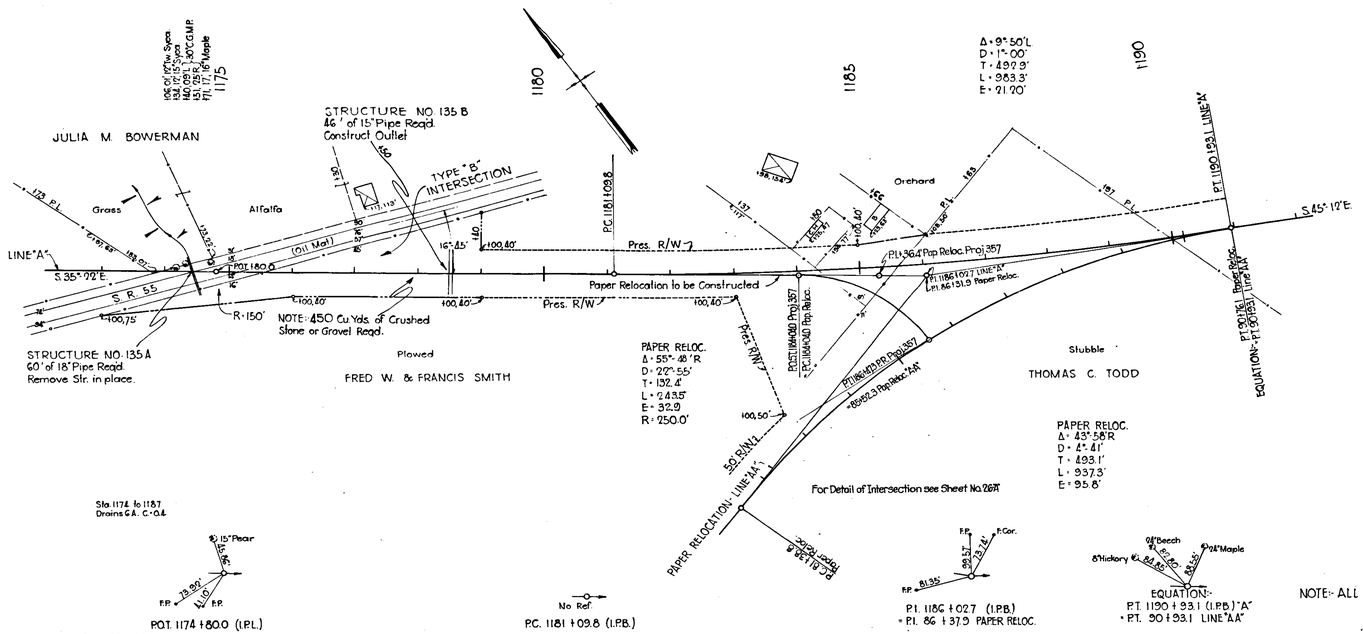
FEDERAL RD. DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	23	148

SECTION - "C"



FEDERAL ROAD DISTRICT NO	STATE	FED AID PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
7	IND	181	1936	23-A	149

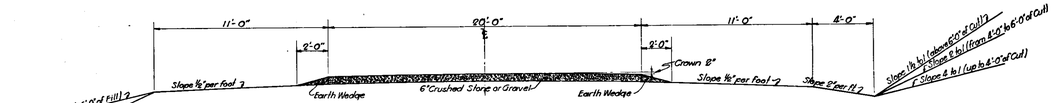
Sec "C"
Construction Change
Revised 5-22-36



NOTE:- ALL R/W ON THIS SHEET AS SHOWN.

B.M. No. 91 Elv. 769.55 Boat spike in 15" Pear Tree, 160' L of Sta. 1185+80.

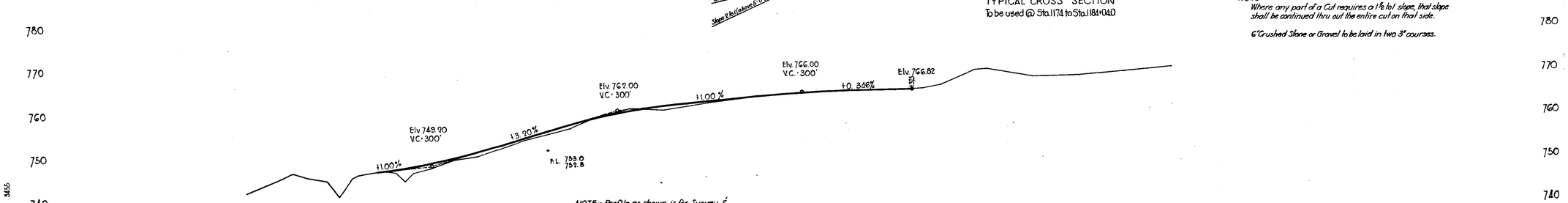
NOTE:- PAPER RELOCATION TO BE CROSS SECTIONED BY PROJ. ENGINEER BEFORE CONSTRUCTION.



TYPICAL CROSS SECTION
To be used @ Sta. 1174 to Sta. 1184+04.0

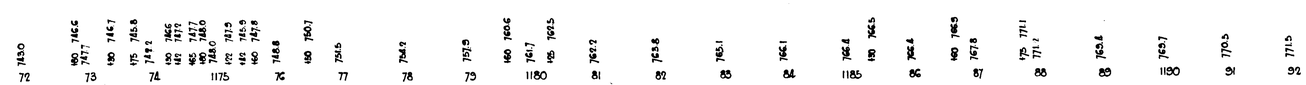
NOTE:-
Where any part of a Cut requires a 1½ to 1 slope, that slope shall be continued thru out the entire cut on that side.

6" Crushed Stone or Gravel to be laid in two 3" courses.



NOTE:- Profile as shown is for Survey ℄.
Grade and Quantities are for Paper Relocation.

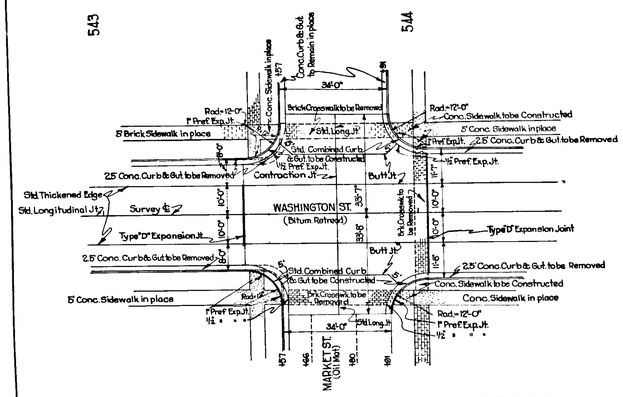
For Quantities - See Sheet No. 22.



C.E.V. 6-11-36

FEDERAL RD. DISTRICT NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND	181	1956	24	149

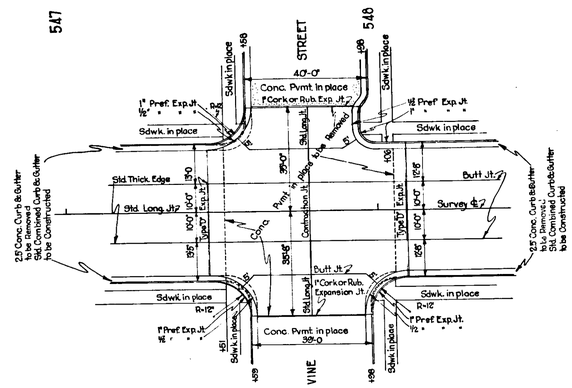
SECTION "G"



DETAIL OF INTERSECTION AT MARKET ST. STA. 543+70

TOTAL QUANTITIES STA. 543+45 to 544+03

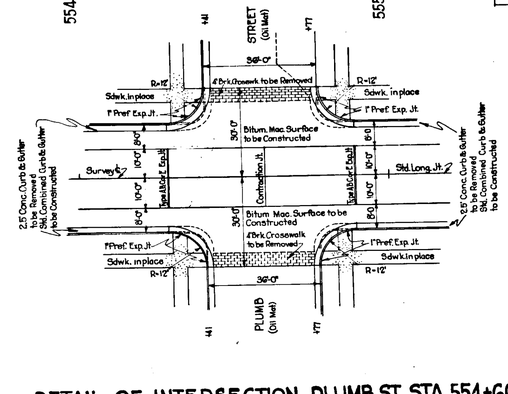
Pavement	370.0 Sq. Yds.
Combined Curb & Gutter	84.0 Lin. Ft.
Conc. Curb & Gutter Removal	52.0 " "
Conc. Sidewalk	9.6 " "
Sidewalk Removal	8.0 " "
½" Preformed Expansion Jt.	84.0 Lin. Ft.
Expansion Joint Type "D"	64.0 " "
Contraction Joint	44.0 " "
1" Preformed Expansion Jt.	40.0 " "



DETAIL OF INTERSECTION VINE ST. STA. 547+78

TOTAL QUANTITIES STA. 547+46 to 548+10

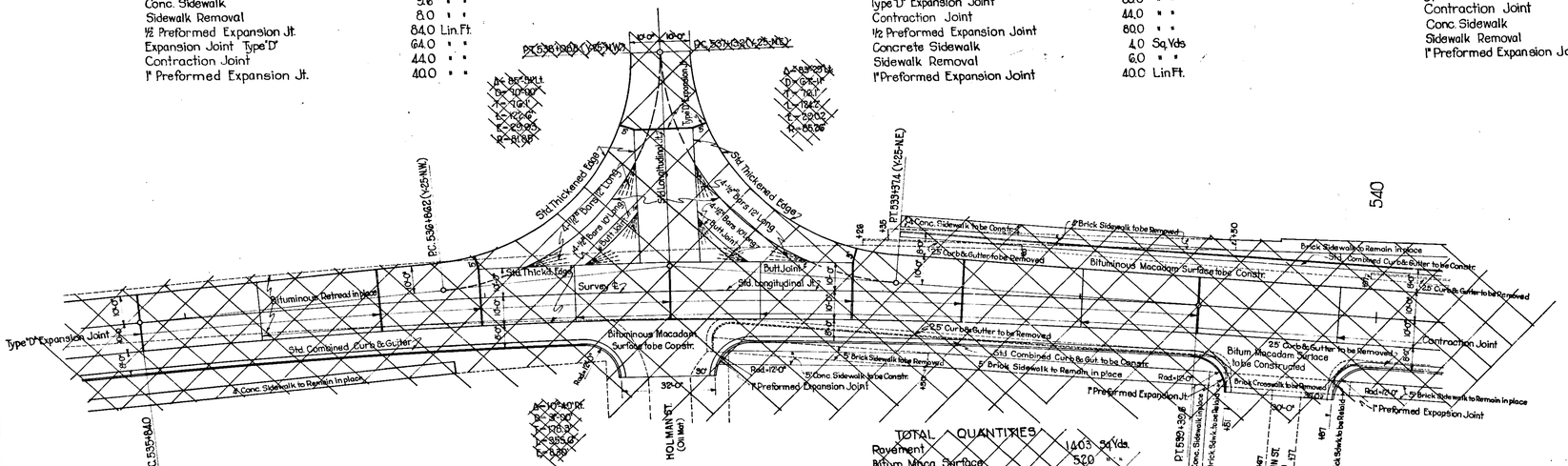
Pavement	412.0 Sq. Yds.
" Removal	37.0 " "
Combined Curb & Gutter	77.0 Lin. Ft.
Conc. Curb & Gutter Removal	80.0 " "
1" Cork or Rubber Expansion Joint	68.0 " "
Type "D" Expansion Joint	88.0 " "
Contraction Joint	44.0 " "
½" Preformed Expansion Joint	80.0 " "
Concrete Sidewalk	4.0 Sq. Yds.
Sidewalk Removal	6.0 " "
1" Preformed Expansion Joint	40.0 Lin. Ft.



DETAIL OF INTERSECTION PLUMB ST. STA. 554+60

TOTAL QUANTITIES STA. 554+29 to 554+89

Pavement	133.3 Sq. Yds.
Bituminous Macadam Surface	193.0 " "
Combined Curb & Gutter	76.0 Lin. Ft.
Conc. Curb & Gutter Removal	80.0 " "
Type A, B, C, or E Expansion Joint	40.0 Lin. Ft.
Contraction Joint	20.0 " "
Conc. Sidewalk	4.0 Sq. Yds.
Sidewalk Removal	6.0 " "
1" Preformed Expansion Joint	40.0 Lin. Ft.



DETAIL OF INTERSECTION STA. 535+84 to 539+20

TOTAL QUANTITIES

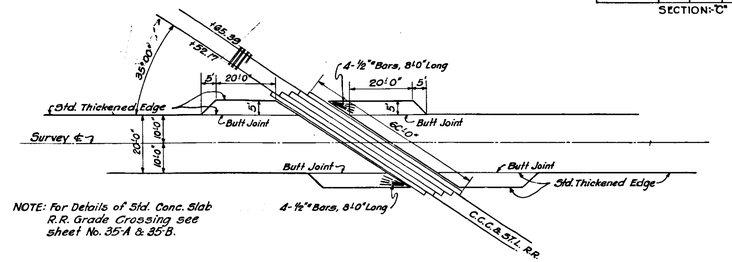
Pavement	1403 Sq. Yds.
Bitum. Maca. Surface	520 " "
Combined Curb & Gutter	532 Lin. Ft.
Reinf. Steel For Pvmt.	903 Pounds
Type "D" Expansion Jt.	184 Lin. Ft.
Contraction Joint	102 " "
Conc. Sidewalk	125 Sq. Yds.
Brick " Removal	124 " "
Conc. Curb & Gutter Removal	276 Lin. Ft.
Brick Crosswalk Removal	19 Sq. Yds.
1" Preformed Expansion	10 Lin. Ft.
Finished Shoulders & Ditches	1.86 " "

See Detail on Sheet No. 24A

Scale 1" = 20'-0"

FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	24-A	149

SECTION: "C"



NOTE: For Details of Std. Conc. Slab R.R. Grade Crossing see sheet No. 35-A & 35-B.

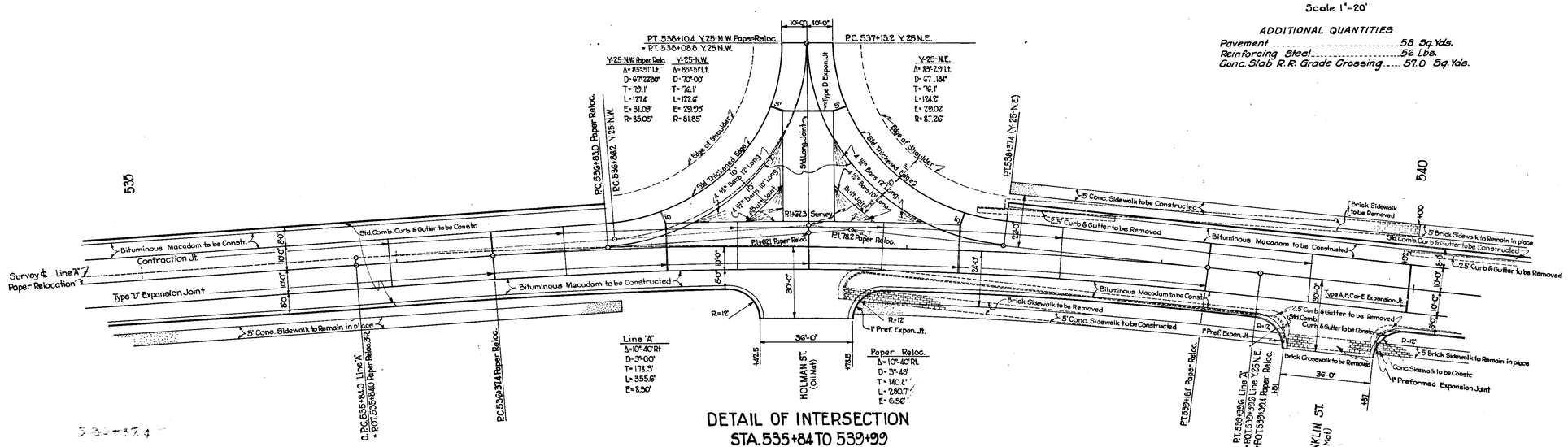
DETAIL OF CONC. SLAB R.R. GRADE CROSSING

STA. 674+61.3

Scale 1"=20'

ADDITIONAL QUANTITIES

Pavement ..... 58 Sq. Yds.
Reinforcing Steel ..... 56 Lbs.
Conc. Slab R.R. Grade Crossing ..... 57.0 Sq. Yds.



DETAIL OF INTERSECTION
STA. 535+84 TO 539+99

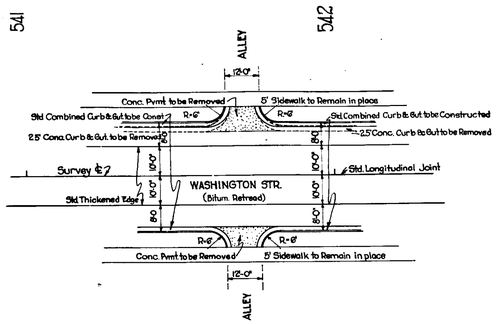
TOTAL QUANTITIES

Pavement	1360 Sq. Yds
Bituminous Macadam Surface	597 " "
Combined Curb & Gutter	632 Lin. Ft.
Reinf. Steel for Pavement	303 lbs.
Type "D" Expansion Joint	140 Lin. Ft.
Conc. Sidewalk	188 Sq. Yds.
Sidewalk Removal	175 " "
Conc. Curb & Gutter Removal	276 Lin. Ft.
1" Preformed Expansion Joint	16 Lin. Ft.
Finishing Shoulders & Ditches	125 " "
Type A, B, C or E Expansion Joint	20 " "
Contraction Joint	122 " "

Scale 1"=20'-0"

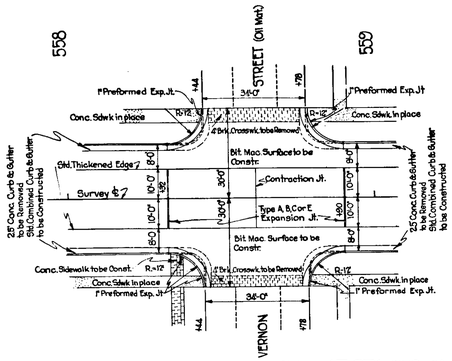
FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	25	149

SECTION "C"



TYPICAL ALLEY INTERSECTION

Scale 1"=20'-0"

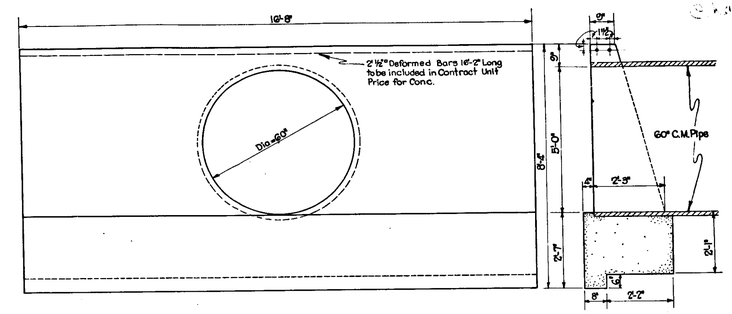


DETAIL OF INTERSECTION AT STA. 558+61

Scale 1"=20'-0"

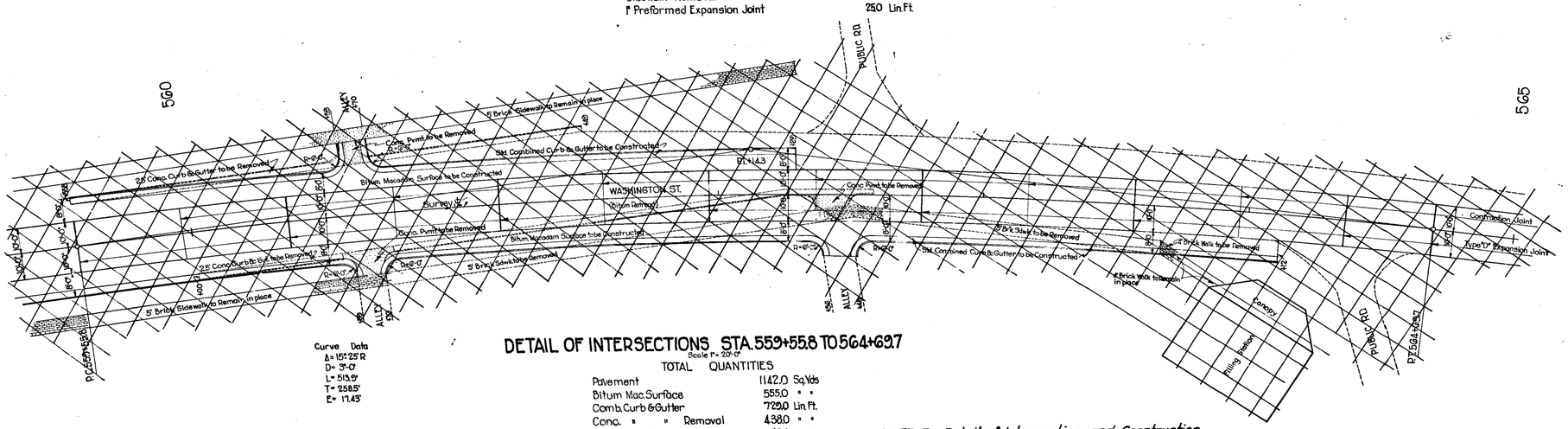
TOTAL QUANTITIES STA. 558+32 to 558+90

Pavement	1289	Sq. Yds
Bituminous Maca. Surface	1930	" "
Combined Curb & Gutter	760	Lin. Ft.
Conc. Curb & Gutter Removal	800	" "
Type A, B, C, or E Expansion Jt.	400	Lin. Ft.
Contraction Joint	200	" "
Conc. Sidewalk	40	Sq. Yds.
Sidewalk Removal	60	" "
1" Preformed Expansion Joint	250	Lin. Ft.



DETAIL OF HEADWALLS FOR STRUCTURE NO. 109

Scale 1"=2'-0"



Curve Data
Δ = 15°25' R
D = 3°-0'
L = 513.9'
T = 258.5'
E = 17.43'

DETAIL OF INTERSECTIONS STA. 559+55.8 TO 564+69.7

Scale 1" = 20'-0"

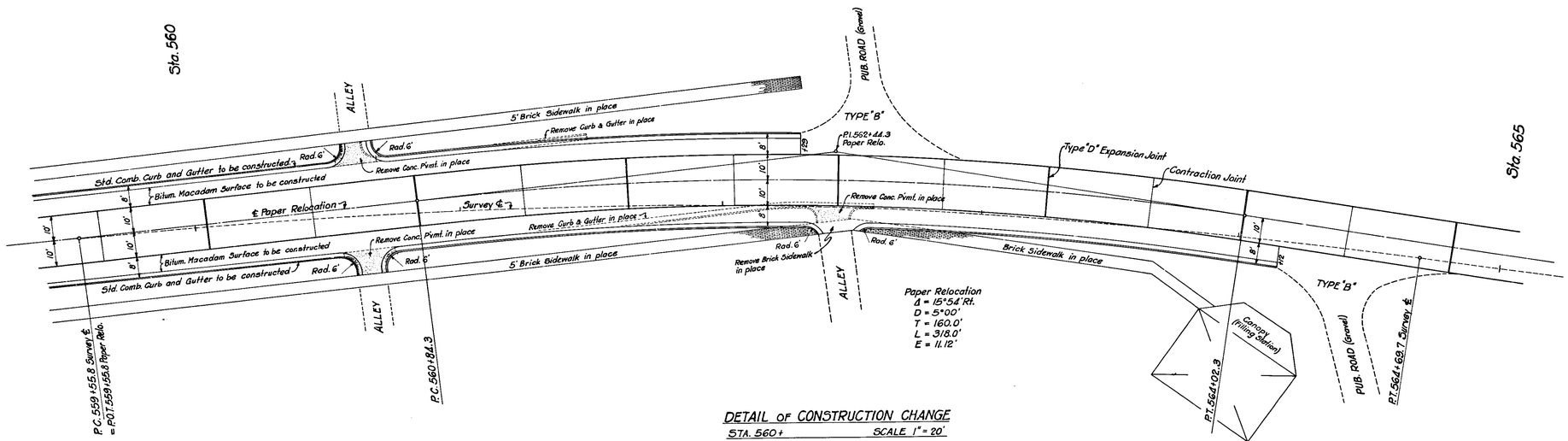
TOTAL QUANTITIES

Pavement	1142.0	Sq. Yds
Bitum. Mac. Surface	555.0	" "
Comb. Curb & Gutter	729.0	Lin. Ft.
Conc. " " Removal	438.0	" "
" " Removal	40.0	" "
" Pvmt. "	32.0	Sq. Yds.
Sidewalk Removal	172.0	" "
Type "D" Expansion Joint	160.0	Lin. Ft.
Contraction Joint	120.0	" "
Shoulders & Ditches	148.0	" "

NOTE: For Detail of Intersection and Construction change see Plans on Sheet No. 25-A

FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	25-A	149

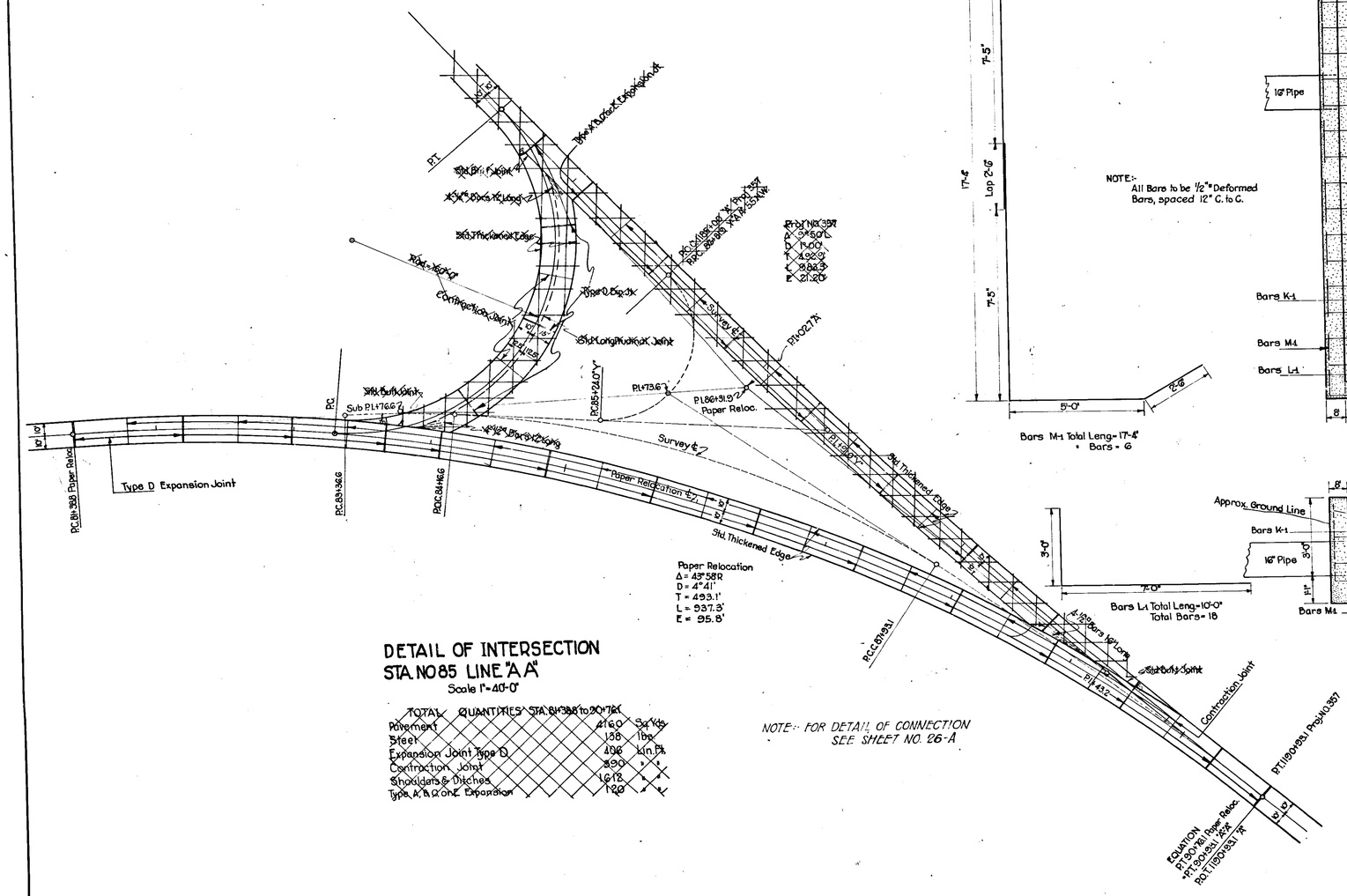
SECTION-"C"
Construction Change



DETAIL OF CONSTRUCTION CHANGE
STA. 560+ SCALE 1" = 20'
Paper Relocation to be Constructed.
Per J. E. Sheldon - Nov. 7, 1935

FEDERAL RD DISTRICT NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	IND.	181	1936	26	149

SECTION "C"

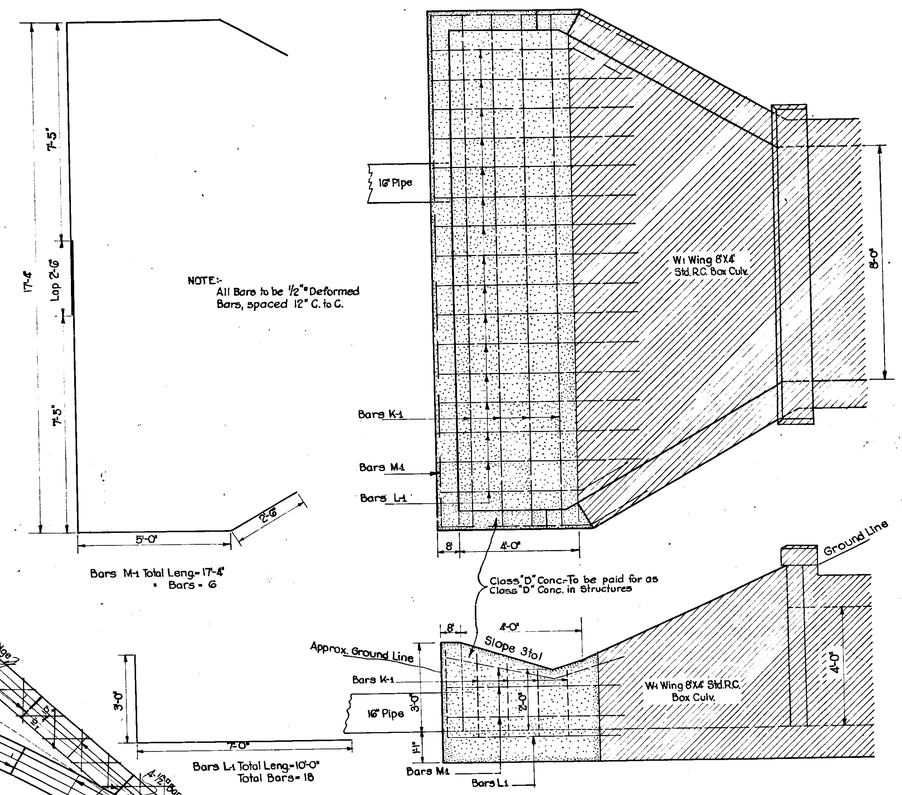


DETAIL OF INTERSECTION
STA. NO 85 LINE "A A"

Scale 1" = 40'-0"

TOTAL QUANTITIES STA. 84+38.8 to 90+76.1		
Pavement	2160	Sq. Yds.
Steel	138	lbs.
Expansion Joint Type D	496	Lin. Ft.
Contraction Joint	890	" "
Shoulders & Ditches	1612	" "
Type A, B & C Int. Expansion	120	" "

NOTE:- FOR DETAIL OF CONNECTION SEE SHEET NO. 26-A



DETAIL OF SPECIAL JUNCTION BOX
STR. NO. 100 STA. 763+46 Lt.

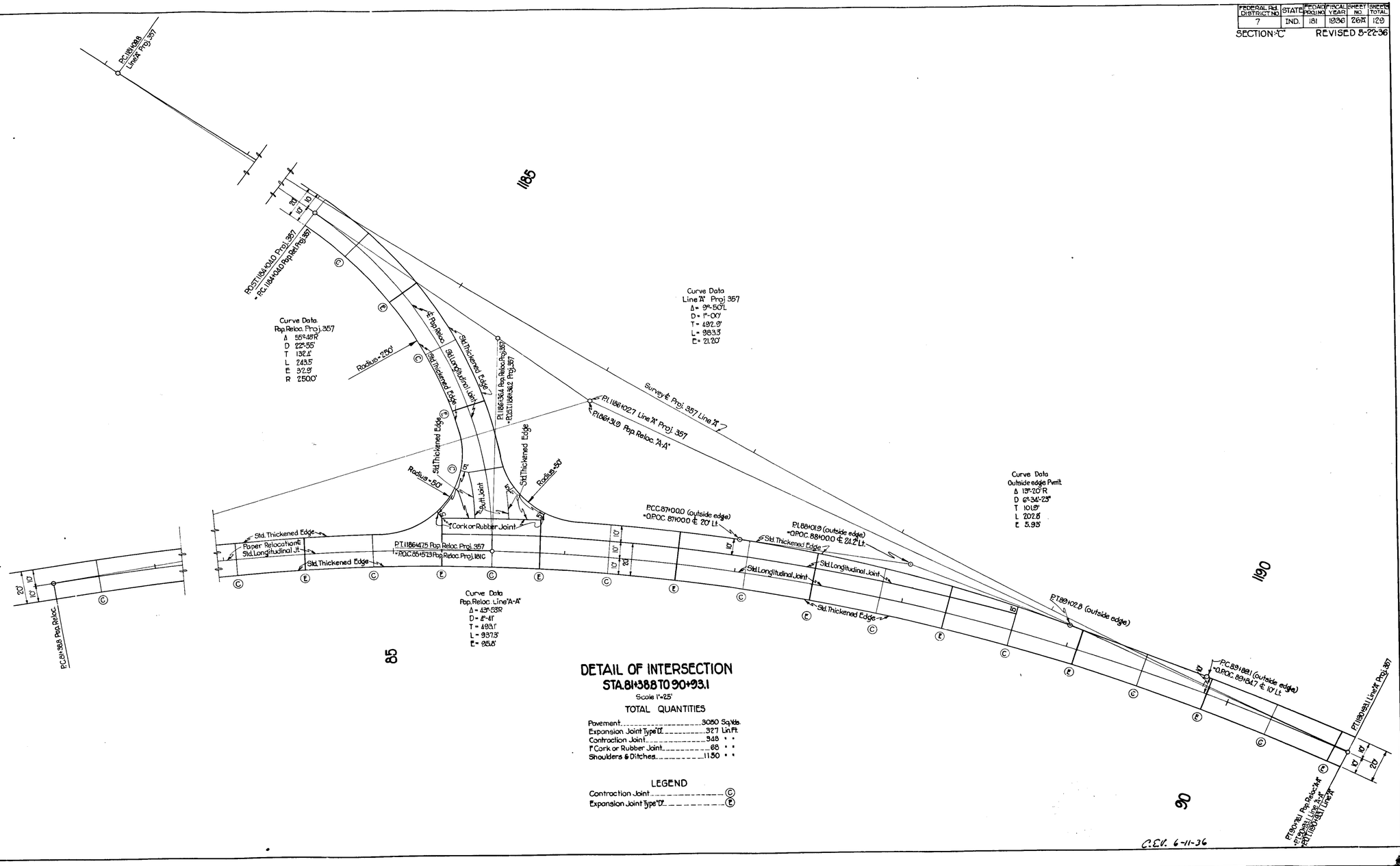
Scale 1" = 2'-0"

Conc. = 52 Cu. Yds.

Steel = 321 Pounds

FEDERAL Aid DISTRICT NO.	STATE	ROAD NUMBER	FISCAL YEAR	SHEET NO.	SHEETS TOTAL
7	IND.	181	1936	26A	120

SECTION-"C" REVISED 8-22-36



DETAIL OF INTERSECTION
STA. 81+38.8 TO 90+93.1

Scale 1"=25'

TOTAL QUANTITIES

Pavement	3050 Sq. Yds.
Expansion Joint Type "D"	327 Lin. Ft.
Contraction Joint	948 " "
1" Cork or Rubber Joint	68 " "
Shoulders & Ditches	1150 " "

LEGEND

Contraction Joint	Ⓒ
Expansion Joint Type "D"	Ⓔ

FEDERAL ROAD DISTRICT NO	STATE	F.A. PROJ NO	FISCAL YEAR	SHEET NO	TO TOTAL SHEETS
7	IND.	181	1986	27	140

SECTION :-"C"

ESTIMATE OF QUANTITIES

BASE & BINDER COURSES.	COURSE OF AGGREGATE TONS	AGGREGATES TONS	SUB GRADE TRIM CU.YDS	AGGREGATE TONS	BITUMINOUS CONCRETE MIXTURE TONS	BITUMINOUS MATERIAL GALS.	FIRST COAT GALS.	BITUMINOUS MATERIAL SECOND COAT GALS.	AGGREGATE TONS	CONCRETE BASE COURSE SQ.YDS.	REINFORCING STEEL LBS.	TELFORD BASE SQ.YDS.	BITUMINOUS AGGREGATE FOR PRIME TONS	BITUMINOUS MATERIAL FOR PRIME GALS.	BITUMINOUS AGGREGATE TONS	BITUMINOUS MATERIAL COATED AGGREGATE TONS	GRADE A SIZE NO. 6 COATED AGGREGATE TONS	SAND COVERING TONS	BITUMINOUS MATERIAL FOR PRIME & SEAL GALS.	LEVELING OR PATCHING COURSE TONS	CONCRETE AGGREGATE TONS	CONCRETE CU.YDS.
FOR ROCK ASPHALT SURFACE																						
CONCRETE																						
WATERBOUND MACADAM																						
BITUMINOUS MACADAM																						
BITUMINOUS CONC. AH																						
BITUMINOUS CONC. AC																						
BIT. COATED AGG. EA																						
BIT. COATED AGG. LA																						
BIT. COATED AGG. T																						
RECONSTRUCTED																						
FOR BITUMINOUS CONC. SURFACE																						
CONCRETE																						
WATERBOUND MACADAM																						
BITUMINOUS MACADAM																						
BITUMINOUS CONC. AH																						
BITUMINOUS CONC. AC																						
BIT. COATED AGG. EA																						
BIT. COATED AGG. LA																						
BIT. COATED AGG. T																						
RECONSTRUCTED																						
CONCRETE (For Brick Surface)																						
TELFORD																						

SURFACE COURSES	CONCRETE SQ.YDS.	REINFORCING PAVEMENT LBS.	BITUMINOUS FILLED VIT. BRICK SQ.YDS.	AGGREGATE TONS	ROCK ASPHALT TONS	BITUMINOUS CONCRETE MIXTURE TONS	PORTLAND CEMENT CONCRETE CU.YDS.	BITUMINOUS COATED AGG. TONS	GRADE A SIZE NO. 6 COATED AGG. TONS	BITUMINOUS MATERIAL FOR PRIME GALS.	BITUMINOUS AGG. FOR PRIME TONS	GRADE A SIZE NO. 6 COATED AGG. TONS	SAND COVERING TONS	COVERING BIT. MATL. FOR PRIME AND SEAL GALS.	CONCRETE AGGREGATE (IN PLACE) TONS	COVERING AGGREGATE FOR SURFACE TONS	ROAD OIL "A" GALS.	OIL "A" NON-ASPHALTIC ROAD OIL GALS.	PENETRATED ASPHALT TONS	CRUSHED STONE OR GRAVEL	REINFORCED CONCRETE SQ.YDS.	PENETRATED CONCRETE RESURFACE SQ.YDS.	BITUMINOUS RESURFACE MATERIAL GALS.
CONCRETE																							
BIT. FILLED VIT. BRICK																							
NAT. ROCK ASPHALT																							
BITUMINOUS CONC. AH																							
BITUMINOUS CONC. AC																							
BIT. COATED AGG. EA																							
BIT. COATED AGG. LA																							
BIT. COATED AGG. T																							
BITUMINOUS MULCH																							
BITUMINOUS RETREAD																							
BITUMINOUS TREATMENT																							
ROAD OIL TREATMENT																							
STONE OR GRAVEL																							
REINF. CONCRETE																							
REINF. CONC. RESURFACE																							
PATCHING																							

EXCAVATION CU. YDS.			SPECIAL BORROW CU.YDS.	SPECIAL FILL MATERIAL CU.YDS.	FINISHING SHOULDERS & DITCHES LIN. FT.	SALVAGED ROAD METAL CU.YDS.	CONCRETE FOR STRUCT. "CLASS D" CU.YDS.	REINFORCING STEEL FOR STRUCTURES LBS.	TIMBER PILING LIN. FT.		BITUMINOUS MACADAM SHOULDERS. LIN. FT.	SHOULDER DRAINS LIN. FT.	PAVED SIDE DITCH LIN. FT.	PAVED GUTTER LIN. FT.
COMMON	SOLID ROCK	PEAT							FURNISHED	DRIVEN				

CATCH BASIN & INLET			INLETS ADJUSTED TO GRADE	MAN HOLES	MANHOLE COVERS ADJUSTED TO GRADE	CONCRETE CURB LIN. FT.			CURB REMOVAL LIN. FT.		STONE CURB RESET LIN. FT.	COMBINED CURB & GUTTER. LIN. FT.			MONUMENTS	RIGHT OF WAY MARKERS (REINF. CONC.)
CONCRETE		BRICK				INTEGRAL	TYPE ""	RESET	CONCRETE	STONE		NEW	REMOVAL	RESET		
CURB & GUTTER TYPE	EARTH DITCH TYPE	CURB & GUTTER														

SIDEWALK SQ. YDS.			CROSSWALKS SQ. YDS.		EXPANSION JOINTS LIN. FT.			CONTRACTION JOINTS. LIN. FT.	PAVEMENT REMOVAL SQ. YDS.	BRICK PAVEMENT RELAID SQ. YDS.	SURFACE REMOVAL SQ. YDS	BLASTING LIN. FT.		RIP RAP SQ. YDS.	GROUTED RIP RAP SQ. YDS	RELAID RIP RAP SQ. YDS
NEW	REMOVAL	RELAID	NEW	REMOVAL	3"	1"	½"					PRELIM.	FINAL			

SODDING	GUARD RAIL			
SQ. YDS.	WIRE ROPE LIN. FT.	FLEX. PLATE LIN. FT.	FUNNEL LIN. FT.	RESET

PIPE

		6"	8"	10"	12"	15"	18"	24"	30"	36"	42"	48"	54"	60"	72"	84"
TRIPLE STRENGTH VIT. CLAY	Lin. Ft.															
REINFORCED CONCRETE	Lin. Ft.															
CAST IRON	Lin. Ft.															
CORRUGATED METAL	Lin. Ft.															
PERFORATED METAL	Lin. Ft.															
VIT. CLAY SEWER	Lin. Ft.															
DRAIN TILE	Lin. Ft.															
PIPE	Lin. Ft.															
FLOOD GATES	Ea.															

BRIDGE AND CULVERT DATA

STRUCTURE NUMBER	LOCATION	DESCRIPTION SIZE	DESCRIPTION KIND	LENGTH "L"	HEIGHT "H"	WINGS "W"	FLOWLINE UP STREAM	FLOWLINE DOWN STREAM	CONCRETE "CLASS O" CU.YDS.	STEEL REINFORCING LBS.	REMARKS	PLANS ON SHEET NO.	STRUCTURE NUMBER
1	52+50.7A		Structure to be built under Separate Contract										1
11	630+50R	12"	Pipe	112'					0.27		Remove 8" Conc. Pipe in place. Conn. to Str. 12		11
12	631+20R		Std. Brick Inlet (Curb & Gutter Type)										12
13	635+11 R		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Remove Inlet in place		13
14	635+11 R	10"	Sewer Pipe	6'							Conn. to Str. 13 & 10" Pipe in place		14
15	635+11 R	18"	"	6'							" " " 13 - 18" " " "		15
16	635+11	24"	V.C. Pipe to be relaid	30'							" " " 13 - 17 Relay 30' of 24" V.C. Pipe in place & Extend with 24" V.C. Pipe		16
		24"	V.C. Pipe	18'									
17	635+11 L		Std. Conc. Catch Basin & Inlet (Earth Ditch Type)						1.70		Conn. to Str. 17. Remove 10" Pipe in place		17
18	635+11 L	24"	Sewer Pipe	10'									18
19	637+41R		Std. Brick Inlet (Curb & Gutter Type)								Conn. to Str. 19 & 21		19
20	637+41 R	12"	V.C. or R.C. Pipe	40'									20
21	637+80R		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Conn. to Str. 21 & 24" Pipe in place. Remove Inlet in place		21
22	637+80R	12"	V.C. or R.C. Pipe	10'									22
23	638+01L	12"	" "	10'							" " " 24 & " " " "		23
24	638+01L		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)										24
25	639+20R		Std. Brick Inlet (Curb & Gutter Type)								Remove Inlet in place		25
26	639+20	12"	V.C. or R.C. Pipe	40'							Conn. to Str. 25 & 27		26
27	639+20L		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)										27
28	639+20L	15"	Sewer Pipe	100'					0.82		Conn. to Str. 27		28
29	544+08R	12"	V.C. or R.C. Pipe	16'							" " " 30 & 12" Pipe at +87. Remove Pipe in place		29
30	544+08R		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Remove Inlet in place		30
31	544+08L	12"	V.C. or R.C. Pipe	16'							Conn. to Str. 32 & 12" Pipe at +87. Remove Pipe in place		31
32	544+08L		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Remove Catch Basin in place		32
33	548+10R	12"	V.C. or R.C. Pipe	16'							Conn. to Str. 34 & 12" Pipe at +95. Remove Pipe in place		33
34	548+10R		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Remove Inlet in place		34
35	548+10L	12"	V.C. or R.C. Pipe	16'							Conn. to Str. 36 & 12" Pipe at +95. Remove Pipe in place		35
36	548+10L		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Remove Inlet in place		36
37	554+89R	12"	V.C. or R.C. Pipe	14'							Conn. to Str. 38 & 18" Pipe at +75. Remove Pipe in place		37
38	554+89R		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Remove Catch Basin in place		38
39	554+89L	12"	V.C. or R.C. Pipe	14'							Conn. to Str. 40 & 18" Pipe at +75. Remove Pipe in place		39
40	554+89L		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Remove Inlet in place		40
41	558+92R		Std. Brick Inlet (Curb & Gutter Type)								Conn. to Str. 41 & 44		41
42	558+92R	12"	V.C. or R.C. Pipe	58'							" " " 44 - 12" Pipe at +76. Remove Pipe in place		42
43	558+20R	12"	" " "	14'							Remove Catch Basin in place		43
44	558+20R		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)								Conn. to Str. 43 & 12" Pipe at +76. Remove Pipe in place		44
45	558+20L	12"	V.C. or R.C. Pipe	14'							Remove Catch Basin in place		45
46	558+20L		Std. Brick Catch Basin & Inlet (Curb & Gutter Type)										46
47	562+30R		Std. Brick Inlet (Curb & Gutter Type)								Conn. to Str. 47. Const. Hdwl. on L		47
48	562+38	15"	V.C. or R.C. Pipe	16'					0.88		" " Pipe in place. Remove pipe in place. Const. 1 Hdwl.		48
49	564+75R	15"	Sewer Pipe	100'					0.38			38	49
50	566+66	4'x8'	Std. R.C. Box Culv.	48'		W.W.	753.2	752.0	22.90	813.4	Remove 3'x2' Conc. Box in place	38	50
51	573+52	5'x5'	" " " " 15° Skew	67'		W.W.	748.2	747.8	62.40	751.8	" 5'x5' " 8" Brick Arch in place		51
52	580+50L	12"	Pipe	16'					0.54				52
53	582+00L	12"	"	16'					0.54				53
54	583+00R	12"	"	130'					0.54		Remove 6" Pipe in place		54
55	586+80R	12"	"	16'									55
56	587+63	15"	V.C., R.C. or C.I. Pipe	52'			785.5	785.3	1.63		Remove 12" Pipe in place	38	56
57	600+66	4'x4'	Std. R.C. Box Culv.	56'		W.W.	762.4	761.8	30.8	4030	Salvage 20 of 36" Pipe in place		57
58	600+66R	6"	Conc. Pipe in place						0.22		Const. 1 Hdwl.		58
59	602+25R	12"	Pipe	24'					0.54				59
60	603+00L	12"	"	16'					0.54				60
61	610+10R	12"	"	16'					0.54		Remove 10" Pipe in place	38	61
62	613+20	5'x3'	Std. R.C. Box Culv.	46'		W.W.	755.4	755.2	23.8	3547	" 3'x3' Conc. Box in place		62
63	613+20R	10"	Conc. Pipe in place						0.24		Const. 1 Hdwl.		63
64	616+00	24"	V.C., R.C. or C.I. Pipe	60'			756.8	756.1	3.57			38	64
65	618+07	8'x5'	Std. R.C. Box Culv. 30° Skew	52'		W.W.	756.8	756.1	87.90	2148	Remove 9'x4.5' Conc. Arch in place		65
66	618+09L	8"	Conc. Pipe to be relaid	50'					0.22		Relay 50' of 8" Conc. Pipe in place. Conn. to 8" Conc. Pipe in place. Const. Hdwl.		66
		8"	Drain Tile	50'									67
67	618+90R	18"	Pipe	16'					0.74				68
68	697+44L	36"	C.M. Pipe to be relaid	20'					3.30		Pipe to be obtained at Str. 57. Sta. 600+66		69
69	697+46R	12"	Pipe	16'					0.54		Remove 10" Pipe in place		70
70	699+00R	12"	"	16'					0.54		" " " "		71
71	701+50L	12"	"	16'					0.54				72
72	704+00R	15"	"	16'					0.64				73
73	704+00L	12"	"	16'					0.54				74
74	705+25R	15"	"	16'					0.64				75
75	708+00R	15"	"	40'					1.64				75A
75A	714+35	24"	V.C., R.C. or C.I. Pipe	84'			808.8	808.4	3.57		Lay Pipe Parallel to Rails		75B
75B	715+00	24"	" " " "	100'			807.0	806.2	3.57		" " " " "		75C
75C	716+70	8"	Sewer Pipe	60'							Remove 8" F.T. in place. Conn. to 8" F.T. in place		76
76	724+81	24"	V.C., R.C. or C.I. Pipe	60'			809.2	807.9	3.57				77
77	724+80	24"	" " " " "	46'			800.0	799.8	3.57				78
78	697+00L	15"	Pipe	16'					0.64				79
79	700+20L	12"	"	16'					0.54		Remove 6" Pipe in place		80
80	700+25R	12"	"	16'					0.54		" 5" " " "		81
81	702+00	15"	V.C., R.C. or C.I. Pipe 30° Skew	64'			806.8	805.4	1.69				82
82	712+71	8"	Sewer Pipe	60'							Remove 8" F.T. in place. Conn. to 8" F.T. in place		83
83	712+80	30"	V.C., R.C. or C.I. Pipe 30° Skew	58'			783.0	783.7	5.46		" 12" Pipe in place		84
84	714+00R	12"	Pipe	16'					0.54			38	85
85	720+18	5'x5'	Std. R.C. Box Culv. 30° Skew	72'		W.W.	775.1	774.8	65.40	7901	Const. Outlet Ditch.		86
86	722+40R	12"	Pipe	16'					0.54		Conn. to Str. 88 & 8" Conc. Pipe in place. Remove 8" Conc. Pipe in place		87
87	725+26	15"	V.C. or R.C. Pipe	48'									88
88	725+26R		Std. Conc. Catch Basin & Inlet (Earth Ditch Type)										89
89	725+60L	12"	Pipe	16'					0.54				90
90	727+50R	12"	"	16'					0.54				91
91	730+75R	12"	"	16'					0.54			38	92
92	735+40	3'x2'	Std. R.C. Box Culv.	60'		W.W.	787.6	787.0	16.90	2814	Remove 15" Pipe in place		93
93	735+46L	6"	Conc. Pipe in place						0.22		Const. Hdwl.		94
94	740+00L	15"	Pipe	40'					1.63				95
95	741+35L	12"	"	16'					0.54		Remove 5" Pipe in place		96
96	749+53R	12"	"	16'					0.54				97
97	751+30L	12"	"	16'					0.54		Remove 8" Pipe in place		98
98	757+18L	12"	"	200'					0.54			38	99
99	763+46	8'x4'	Std. R.C. Box Culv.	51'		W.W.	765.4	765.2	68.74	7080	" 8'x4' Conc. Arch in place	38	100
100	762+40L		Special Conc. Junction Box						5.20	381	Conn. to Str. 99 & 101		

(Continued on Next Sheet)

FEDERAL ROAD DISTRICT NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOT. SHEETS
7	IND.	181	1936	28	149

SECTION "C"

ESTIMATE OF QUANTITIES

BASE & BINDER COURSES	COURSE AGGREGATE TONS	SCREENINGS TONS	SUB-GRADE FINE AGGREGATE CU.YDS.	BITUMINOUS CONCRETE MIXTURE TONS	BITUMINOUS MATERIAL 1st & 2nd COAT GALS.	BITUMINOUS MATERIAL 3rd COAT GALS.	AGGREGATE TONS	CONC. BASE COURSE SQ.YDS.	REINFORCING STEEL LBS	TELFORD BASE SQ.YDS.	BITUMINOUS COATED AGGREGATE EA TONS	BITUMINOUS COATED AGGREGATE LA TONS	BITUMINOUS COATED AGGREGATE T TONS	GRADE A SIZE NO. 6 COVERING AGGREGATE TONS	SAND COVERING TONS	BITUMINOUS MATERIAL FOR PRIME & SEAL GALS	LEVELING OR WEDGE COURSE TONS	COVERING AGGREGATE TONS	CONCRETE CU.YDS.
FOR ROCK ASPHALT SURFACE																			
CONCRETE																			
WATERBOUND MACADAM	35,418	10,646	4258																
BITUMINOUS MACADAM					126,949	30,468	17,062												
BITUMINOUS CONC. AH																			
BITUMINOUS CONC. AC																			
BIT. COATED AGG. EA																			
BIT. COATED AGG. LA																			
BIT. COATED AGG. T																			
RECONSTRUCTED																			
FOR BITUMINOUS CONC. SURFACE																			
CONCRETE																			
WATERBOUND MACADAM	33,166	9929	4258																
BITUMINOUS MACADAM					126,949	30,468	15,843												
BITUMINOUS CONC. AH																			
BITUMINOUS CONC. AC																			
BIT. COATED AGG. EA																			
BIT. COATED AGG. LA																			
BIT. COATED AGG. T																			
RECONSTRUCTED																			
CONCRETE (For Brick Surface																			
TELFORD																			

SURFACE COURSES	REINF. CONCRETE PAVEMENT SQ.YDS.	REINFORCING STEEL LBS.	BITUMINOUS FILLED VIT. BRICK SQ.YDS.	CONCRETE HEADER LIN.FT.	ROCK ASPHALT TONS	BITUMINOUS CONCRETE MIXTURE TONS	PORTLAND CEMENT CONCRETE CU.YDS.	BITUMINOUS COATED AGG. EA TONS	BITUMINOUS COATED AGG. LA TONS	BITUMINOUS COATED AGG. T TONS	GRADE "A" SIZE NO. 6 COVER. AGG. TONS	SAND COVERING TONS	BIT. MATL. FOR PRIME AND SEAL GALS.	AGGREGATE TONS	SUBGRADE FINE AGGREGATE CU.YDS.	BITUM. MATERIAL 1st & 2nd COAT GALS.	BITUM. MATERIAL 3rd COAT GALS.	TYPE "B" MONUMENTS	CRUSHED STONE OR GRAVEL CU.YDS.	TYPE "C" MONUMENTS	TYPE "D" MONUMENTS	1/2" PREF. BIT. EXPANSION JOINT LIN.FT.	1" CORK OR RUBBER EXPANSION JT. LIN.FT.	TYPE D EXPANSION JOINT LIN.FT.	TYPE A, B, C OR E EXPANSION JOINT LIN.FT.	CONTRACTION JOINT LIN.FT.
CONCRETE																										
BIT. FILLED VIT. BRICK																										
NAT. ROCK ASPHALT				120	3526									765	177	5314	1275	1	580	3						
BITUMINOUS CONC. AH				120		7556								765	177	5314	1275	1	580	3						
BITUMINOUS CONC. AC																										
BIT. COATED AGG. EA																										
BIT. COATED AGG. LA																										
BIT. COATED AGG. T																										
BITUMINOUS MULCH																										
BITUMINOUS RETREAD																										
BITUMINOUS TREATMENT																										
ROAD OIL TREATMENT																										
STONE OR GRAVEL																										
REINF. CONCRETE	100,754	2311												765	177	5314	1275		580	3	1	1068	128	1953	9520	11,155
REINF. CONC. RESURFACE																										
PATCHING																										

EXCAVATION CU. YDS. COMMON	EXCAVATION SOLID ROCK	EXCAVATION PEAT	SPECIAL BORROW CU.YDS.	SPECIAL FILL MATERIAL CU.YDS.	FINISHING SHOULDERS & DITCHES LIN.FT.	SALVAGED ROAD MATERIAL CU.YDS.	CONCRETE FOR STRUCT. "CLASS D" CU.YDS.	REINFORCING STEEL FOR STRUCTURES LBS.	TIMBER PILING LIN. FT. FURNISHED	TIMBER PILING DRIVEN	BITUMINOUS MACADAM SHOULDERS LIN.FT.	SHOULDER DRAINS LIN.FT.	PAVED SIDE DITCH LIN.FT.	PAVED GUTTER LIN.FT.
85,107					40,910	50	1045.0	91,429					1530	

CATCH BASIN & INLET CONCRETE CURB & GUTTER TYPE	CATCH BASIN CONCRETE EARTH DITCH TYPE	CATCH BASIN BRICK CURB & GUTTER	INLETS ADJUSTED TO GRADE	MAN HOLES	MANHOLE COVERS ADJUSTED TO GRADE	CONCRETE CURB LIN. FT. INTEGRAL	CONCRETE CURB TYPE " "	CONCRETE CURB RESET	CURB REMOVAL LIN.FT. CONCRETE	CURB REMOVAL STONE	STONE CURB RESET LIN.FT.	COMBINED CURB & GUTTER LIN. FT. NEW	COMBINED CURB & GUTTER REMOVAL	COMBINED CURB & GUTTER RESET	MONUMENTS	RIGHT OF WAY MARKERS (REINF. CONC.)
	2	12							40			6241	4374			

SIDEWALK SQ. YDS. NEW	SIDEWALK REMOVAL	SIDEWALK RELAID	CROSSWALKS SQ.YDS. NEW	CROSSWALKS REMOVAL	EXPANSION JOINTS LIN. FT. 3"	EXPANSION JOINTS 1"	EXPANSION JOINTS 1/2"	EXPANSION JOINTS	CONTRACTION JOINTS LIN.FT.	PAVEMENT REMOVAL SQ.YDS.	BRICK PAVEMENT RELAID SQ.YDS.	SURFACE REMOVAL SQ.YDS.	BLASTING LIN. FT. PRELIM.	BLASTING FINAL	RIP RAP SQ.YDS.	GROUTED RIP RAP SQ.YDS.	RELAID RIP RAP SQ.YDS.
210.0	373.0									502					100		

SODDING SQ.YDS.	GUARD RAIL WIRE ROPE LIN. FT.	GUARD RAIL FLEX. PLATE LIN. FT.	GUARD RAIL FUNNEL LIN. FT.	GUARD RAIL RESET	1" PREFORMED EXPANSION JOINT LIN. FT.	STD. BRICK INLET-CURB & GUTTER TYPE	CONCRETE SLAB R.R. CROSSING SQ.YDS.
25,427		1846			389	5	57.0

PIPE		6"	8"	10"	12"	15"	18"	24"	30"	36"	42"	48"	54"	60"	72"	84"	RELAID PIPE 8"	10"	12"	15"	16"	24"	36"	60"
TRIPLE STRENGTH V.T. CLAY	Lin. Ft.					6		18												10		30		
REINFORCED CONCRETE	Lin. Ft.							10																
CONCRETE	Lin. Ft.																50		16		16	30		
CORRUGATED METAL	Lin. Ft.													78									20	40
PERFORATED METAL	Lin. Ft.																							
~~VIT. CLAY~~ SEWER PIPE	Lin. Ft.	60	120	6		200	6	170																
DRAIN TILE	Lin. Ft.		50																					
PIPE	Lin. Ft.				1326	248	56																	
V.C., R.C. OR C.I.	Lin. Ft.					164	54	452	58															
V.C. OR R.C.	Lin. Ft.				338	120																		

BRIDGE AND CULVERT DATA

STRUCTURE NUMBER	LOCATION	SIZE	KIND	LENGTH "L"	HEIGHT "H"	WINGS "W"	FLOW LINE UP STREAM	FLOW LINE DOWN STREAM	CONCRETE "CLASS D" CU.YDS.	STEEL REINFORCING LBS.	REMARKS	PLANS ON SHEET NO.	STRUCTURE NUMBER
101	763+46 Lt.	16"	Pipe in place.								Connect to Str. 100 Remove Conc. Ret. Wall in place.		101
102	769+70 Rt.	12"	Pipe	16'					0.54				102
103	778+50 Rt.	12"	"	16'					0.54				103
104	780+54	24"	V.C., R.C. or C.I. Pipe	52'			765.4	765.2	3.57		Remove 21"x21" Stone Culv. in place.		104
105	790+50 Rt.	12"	Pipe	16'					0.54				105
106	791+78 Rt.	12"	"	16'					0.54				106
107	798+56 Lt.	12"	Conc. Pipe Relaid	16'					0.54				107
108	801+20 Lt.	12"	Pipe	16'					0.54		Remove 10" Pipe in place.		108
109	803+24 Rt.	60"	C.M. Pipe Relaid; C.M. Pipe	40'; 78'					18.88		Relaid Pipe to be obtained at Sta. 804+36	25	109
110	804+36	16'	Std. R.C. Culv. (Slab Top) under Fill	48'	8'	4@30°	727.5		227.0	11,464		34	110
111	804+90 Lt.	24"	Conc. Pipe relaid; R.C. Pipe	30'; [illegible]					3.57		Relay 30' of 24" Pipe in place.		111
112	807+00 Lt.	15"	V.C. Pipe relaid; V.C. Pipe	10'; [illegible]					0.64		Relay 10' of 15" V.C. Pipe in place.		112
113	813+82 Rt.	12"	Pipe	16'					0.54				113
114	820+00 Lt.	12"	"	16'					0.54		Remove 6" Pipe in place.		114
115	827+67	8'x8'	Std. R.C. Box Culv.	58'		W1 W1	720.6	720.4	112.80	11,816	Remove 11'x7.5' Conc. Culv. in place.	33	115
116	829+84 832+68 Rt.	12"	Pipe	284'					0.54		Remove 7" Tile in place.		116
117	841+20 Lt.	12"	"	16'					0.54		Remove 5" Tile in place.		117
118	843+30 Lt.	12"	"	16'					0.54				118
119	843+50 Rt.	12"	"	16'					0.54		Remove 10" Pipe in place.		119
120	846+55 Lt.	12"	"	16'					0.54		" " " "		120
121	851+55	6"	Sewer Pipe	60'					0.22		Remove 5" Tile in place. Connect to 5" Tile in place. Const. Hdwl.		121
122	851+55 Rt.	4"	F. Tile in place						0.22		Const. Hdwl.		122
123	851+76	24"	V.C., R.C. or C.I. Pipe	50'			750.0	748.8	3.57		Remove 15" Pipe in place.		123
124	854+00 Rt.	12"	Pipe	16'					0.54				124
125	854+10 Lt.	12"	"	16'					0.54				125
126	863+60 Rt.	12"	"	16'					0.54				126
127	866+80 Lt.	12"	"	16'					0.54				127
128	868+10 Lt.	16"	Conc. Pipe Relaid	16'					0.68				128
129	875+80 Lt.	15"	Pipe	40'					1.63				129
130	876+25 Rt.	15"	"	40'					1.63				130
131	44+80	8'x6'	Std. R.C. Box Culv.	94'		W1 W1	692.8	691.2	182.72	17,916	Remove 8'x6' Conc. Box Culv. in place.	33	131
132	47+00 Lt.	12"	Pipe	16'					0.54				132
133	47+20 Rt.	12"	"	16'					0.54				133
134	63+00	18"	V.C., R.C. or C.I. Pipe on 30° skew	54'			740.0	739.4	2.16				134
135	73+00	3'x2'	Std. R.C. Box Culv.	50'		W1 W1	745.0	744.3	14.66	2393		33	135
136	1197+82	3'x2'	Std. R.C. Box Culv.	50'		W1 W1	765.2	765.0	14.66	2393		33	136
137	1217+00	15"	V.C., R.C. or C.I. Pipe	48'			781.6	780.8	1.63		Const. Inlet and Outlet		137
138	1224+50 Rt.	15"	Pipe	40'					1.63				138
139	1225+00 Lt.	18"	"	40'					2.16		Remove 18" Pipe in place.		139