

WILLIAMS COUNTY
S.H. 309, SEC. Bryan (Pt.)
S.H. 310, SEC. Bryan (Pt.)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BRYAN-EDGERTON ROAD
S.H. 309, SEC. Bryan (Pt.)
BRYAN-NAPOLEON ROAD
S.H. 310, SEC. Bryan (Pt.)
WILLIAMS COUNTY
CITY OF BRYAN

CONVENTIONAL SIGNS

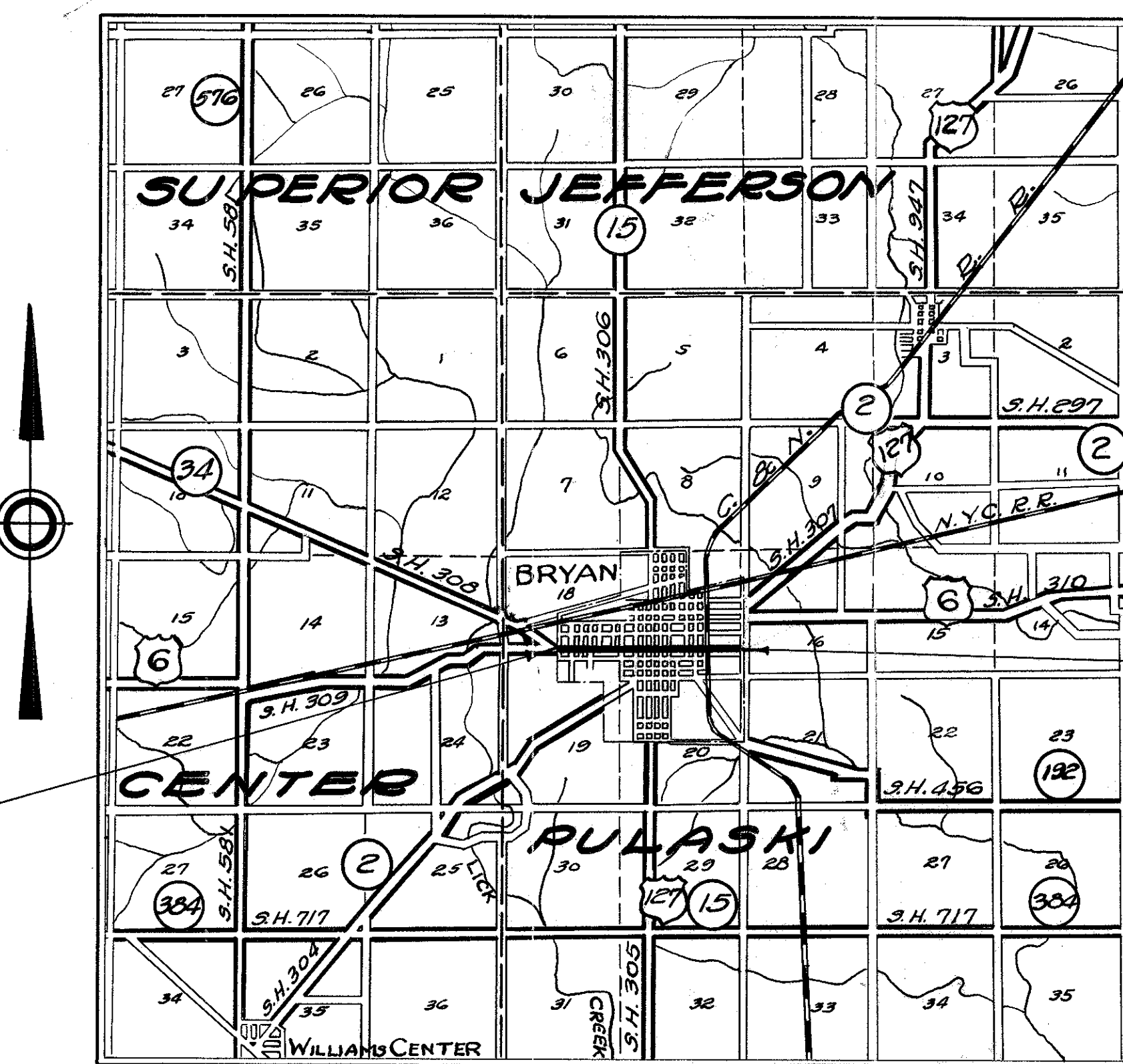
STATE LINE	-----
COUNTY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
CENTER LINE	-----
PROPERTY LINE	-----
CITY OR VILLAGE LINE	-----
FENCE LINE	-----
STEAM RAILROAD	-----
POLE LINE	-----
GUARD RAIL	-----
DRAIN PIPE, NEW	-----
DRAIN PIPE, OLD	-----

INDEX OF SHEETS

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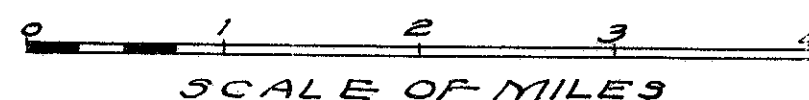
Begin Project Sta. 5+58

End Project Sta. 64+60



Delivery Point ~ Bryan Average Haul = 3/4 Mile

LOCATION PLAN



PORTION TO BE IMPROVED STATE HIGHWAYS
OTHER HIGHWAYS

SCALES

PLAN 1" = 25'
PROFILE-HORIZONTAL 1" = 25'
PROFILE-VERTICAL 1" = 5'

The Standard Specifications of The State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the Proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.
The Right-of-Way necessary for this improvement will be provided by the State of Ohio.

Approved: *[Signature]*
Date: 7/16/43 Resident Division Deputy Director.

Approved: _____
Date: _____ Chief Engineer, Bureau of Maintenance.

Approved: _____
Date: _____ Chief Engineer, Bureau of Bridges & R.R. Crossings.

Approved: *[Signature]*
Date: 7/17/43 Chief Engineer, Bureau of Location & Right of Way.

Approved: *[Signature]*
Date: 3-5-43 First Asst. Director & Chief Engineer.

Approved: *[Signature]*
Date: 2-5-43 Director of Highways.

CONSTRUCTION BUREAU
JUL 26 1955
GROUND PH. AB

LINE DATA

Begin Project and Section Bryan (Pt.) - Sta. 5+58
End Project and Section Bryan (Pt.) - Sta. 64+60
Gross Length of Section Bryan (Pt.) = 7902.0 Lin. Ft.
Deduction for Railroad Crossing Sta. 68+92.2 to Sta. 69+13.7 = 21.3 Lin. Ft.
Net Length of Project = 7880.5 Lin. Ft. or 1.492 Miles

382

STANDARD DRAWINGS	
Number	Date
6-7.07	6-1-42
I-8 C.B. No. 6	12-15-41
I-1, 2, 3, 4 & 5	3-1-39
I-12	7-1-42

SUPPLEMENTAL SPECIFICATIONS	
5-122	4-15-37
177	Adopted 8-25-42
178	Adopted 9-21-42

FILE NO.	WILLIAMS CO. S.H. 309, Sec. Bryan (Pt.) & S.H. 310, Sec. Bryan (Pt.)
DATE OF LETTING	1943
CONTRACT NO.	

TYPICAL SECTIONS

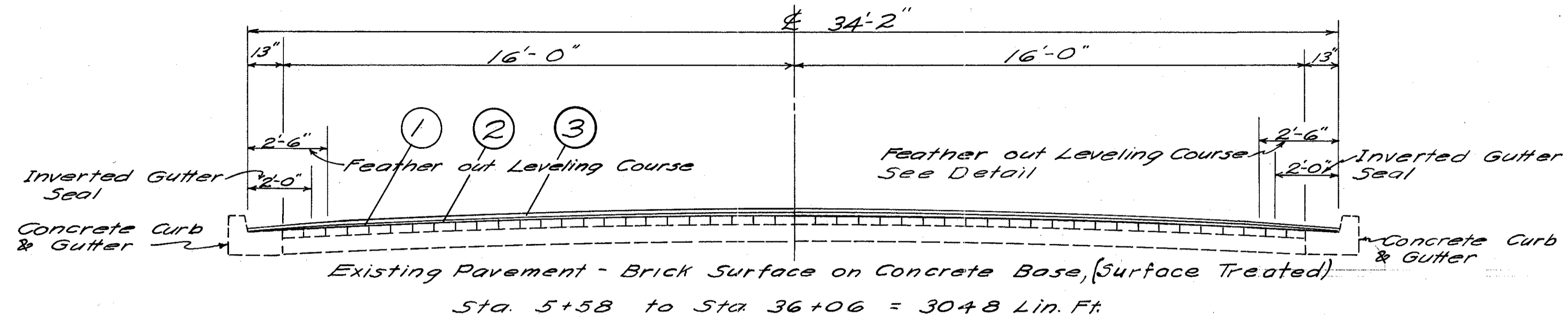
TYPE T-35

SCALE 3/8" = 1'

FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1943

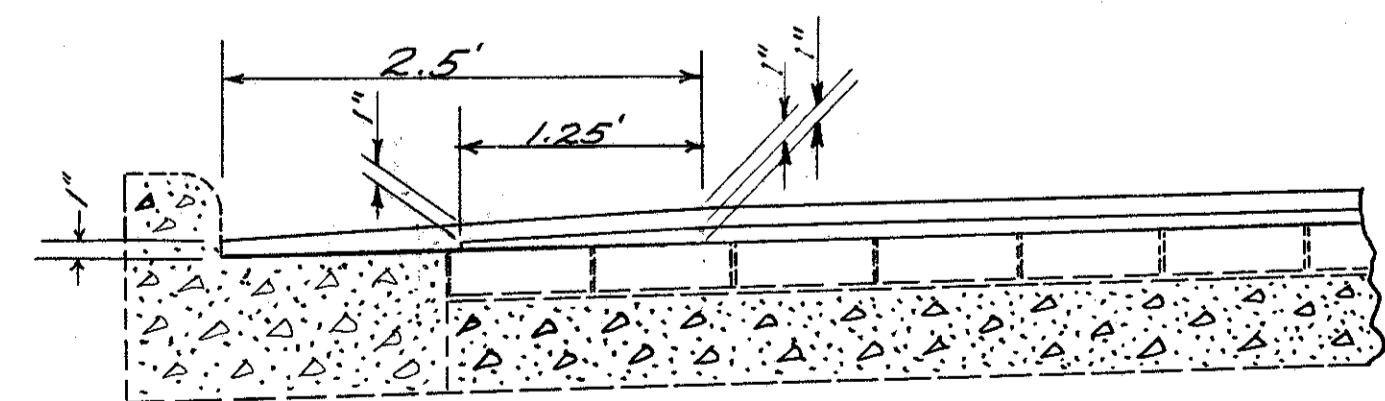
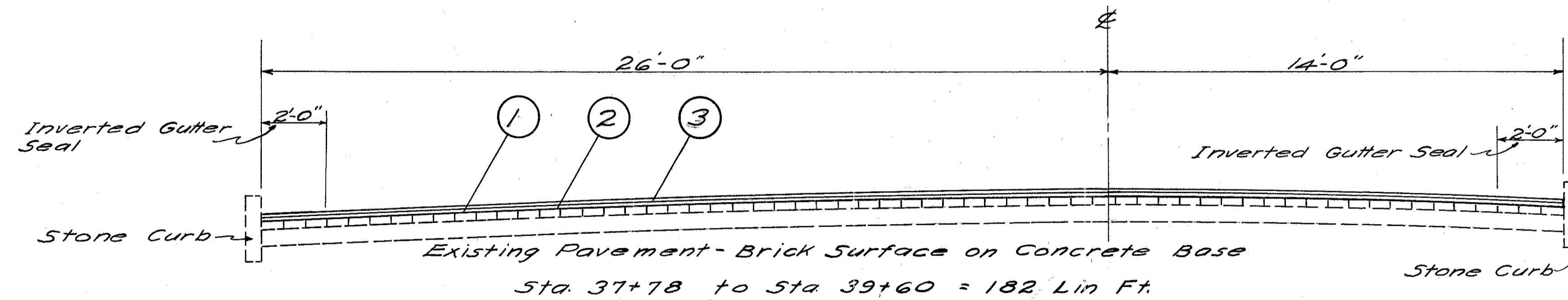
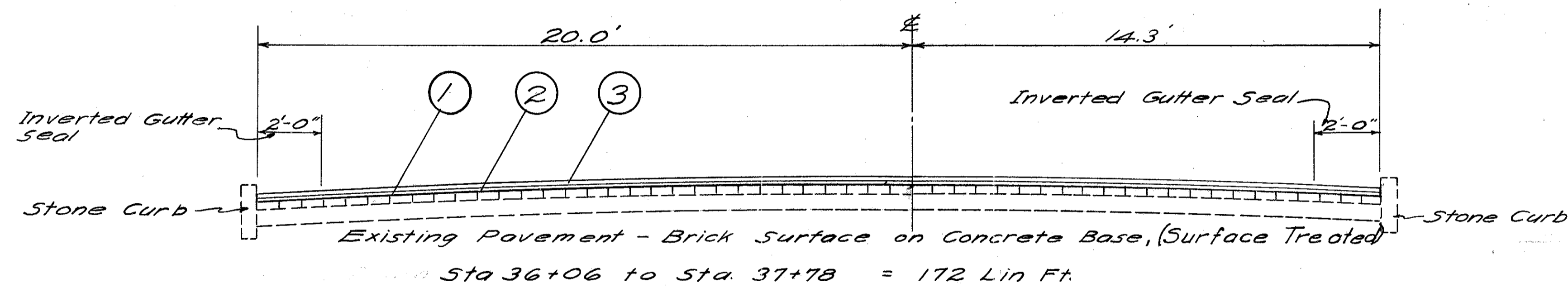
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WILLIAMS COUNTY
S.H. 309 Sec BRYAN (pt)
S.H. 310 Sec. BRYAN (pt)



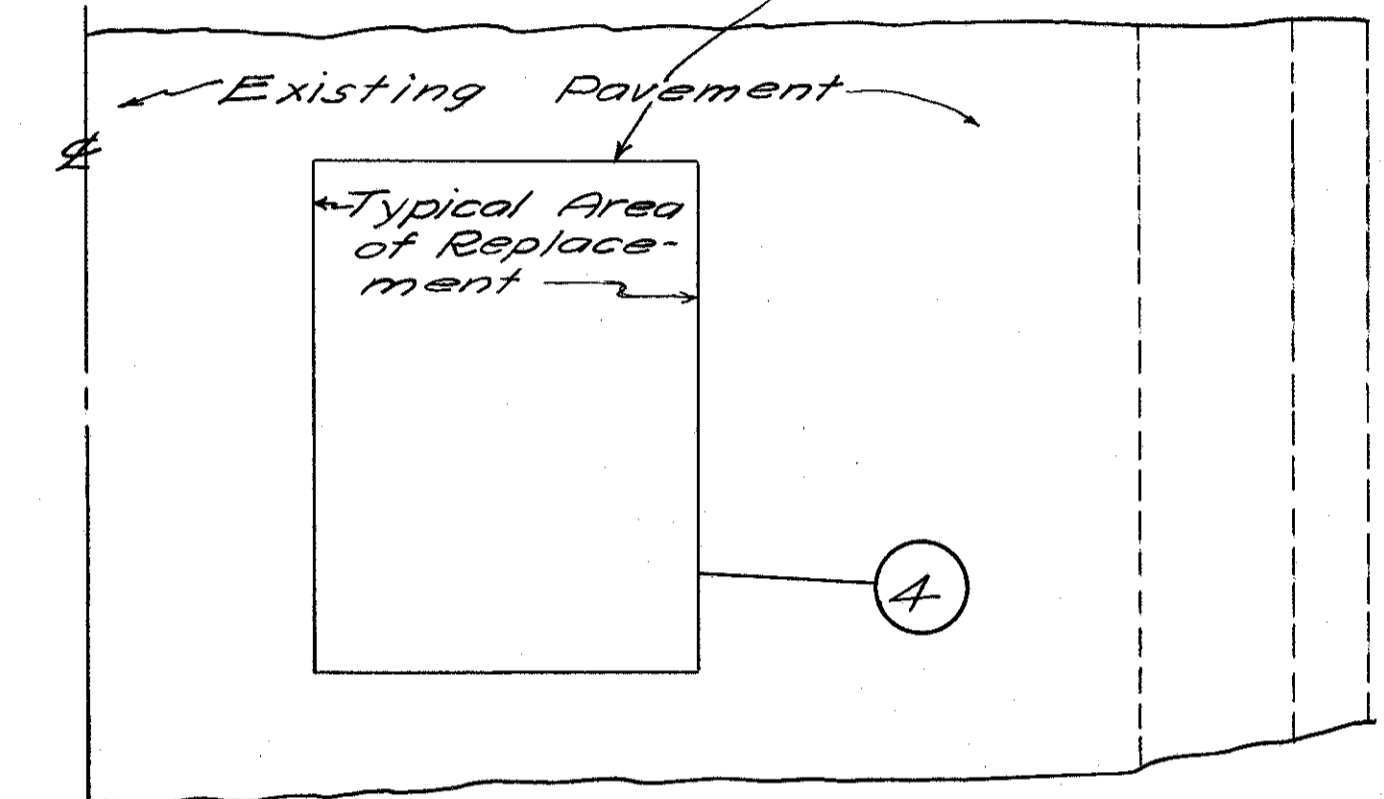
Note - Existing pavement sta. 5+58 to sta. 37+78 is covered with Bituminous concrete. This Bituminous surface is to be removed.

7

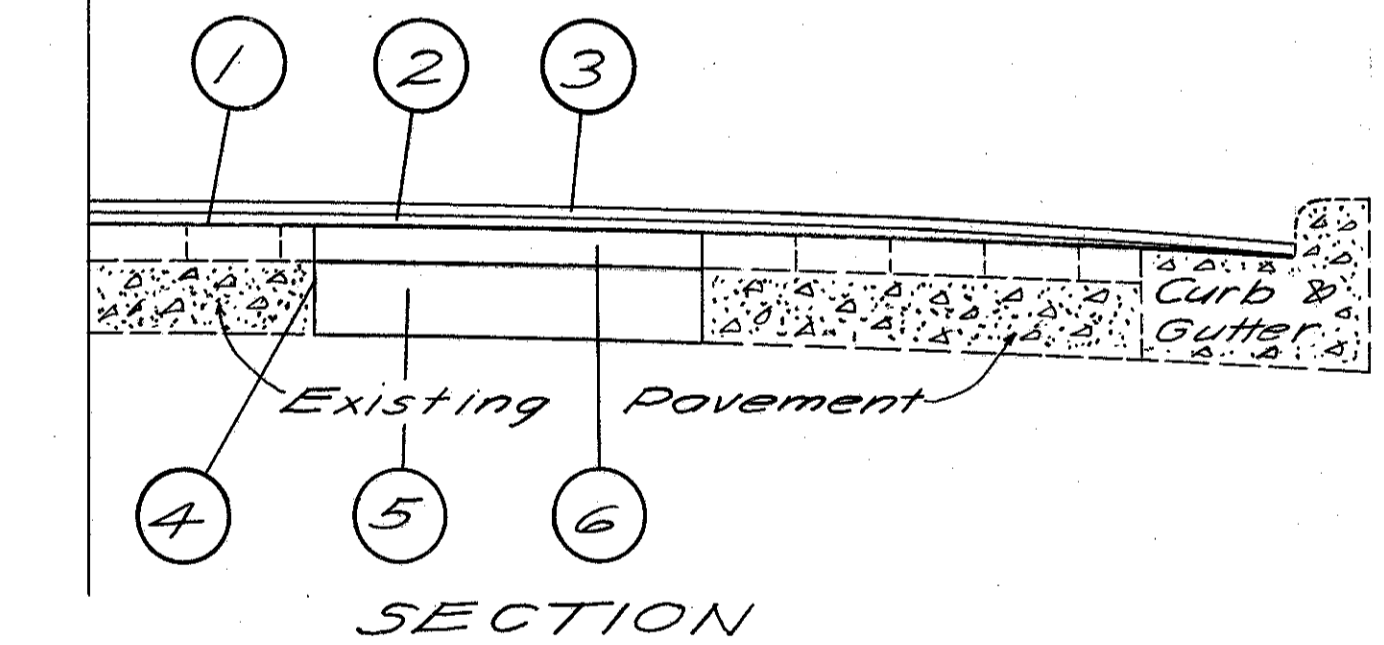


DETAIL OF RESURFACING AT CURBS
Sta. 5+58 to Sta. 36+06

Note: The 3" course of B-35 material shall be finished not less than 1/4" above the existing pavement surface.



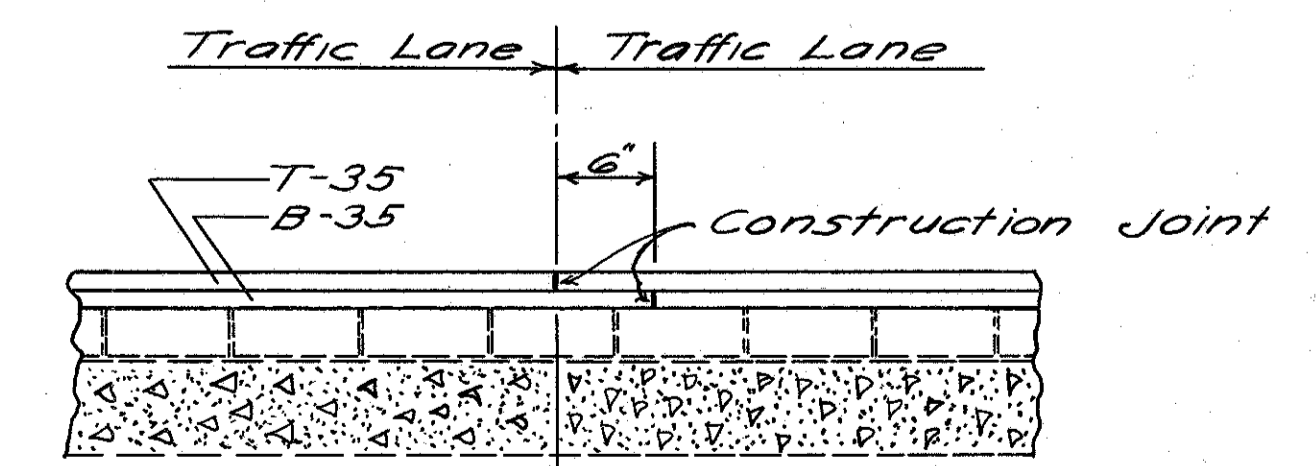
PLAN



SECTION

DETAIL FOR REPLACEMENT OF UNSATISFACTORY EXISTING PAVEMENT.

- ① Item T-30, Bituminous Prime Coat using Bituminous Material, Federal Specification 55-A-674 with Amend 1, Type II applied at the rate of 0.10 Gal. per sq yd. including sand cover.
- ② Item B-35, 1" Minimum Thickness, Asphaltic Concrete Leveling Course.
- ③ Item T-35, 1" Asphaltic Concrete Surface Course, Type "B".
- ④ Item E-10, Cutting and Sealing of Existing Pavement Edge.
- ⑤ Item I-20, 5" Insulation Course (Coarse Graded Type)
- ⑥ Item B-35, 3" Asphaltic Concrete Base Course
- ⑦ Item E-8, Removal and Disposal of Existing Bituminous Wearing Course



DETAIL OF LONGITUDINAL CONSTRUCTION JOINT

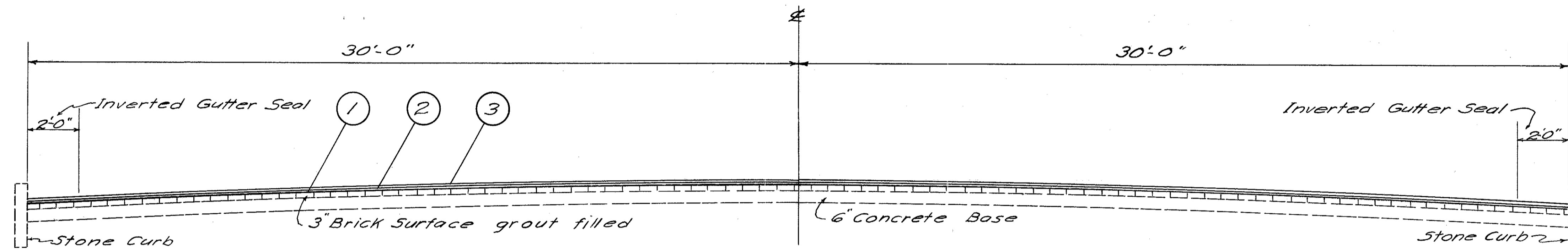
FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR	3 17
10	OHIO		1943	

WILLIAMS COUNTY
 SH. 309 Sec. BRYAN (pt)
 SH. 310 Sec. BRYAN (pt)

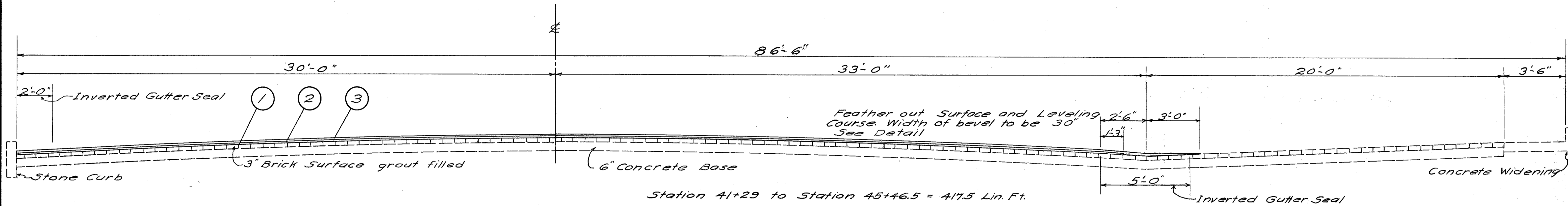
TYPICAL SECTIONS

TYPE T-35

SCALE 3/8" = 1'

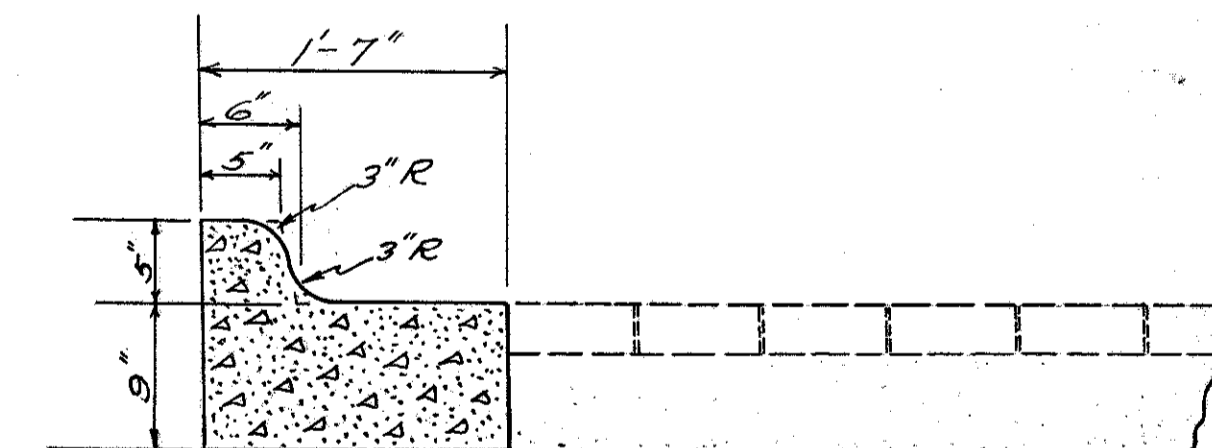


Station 39+60 to Station 41+29 = 169 Lin. Ft.



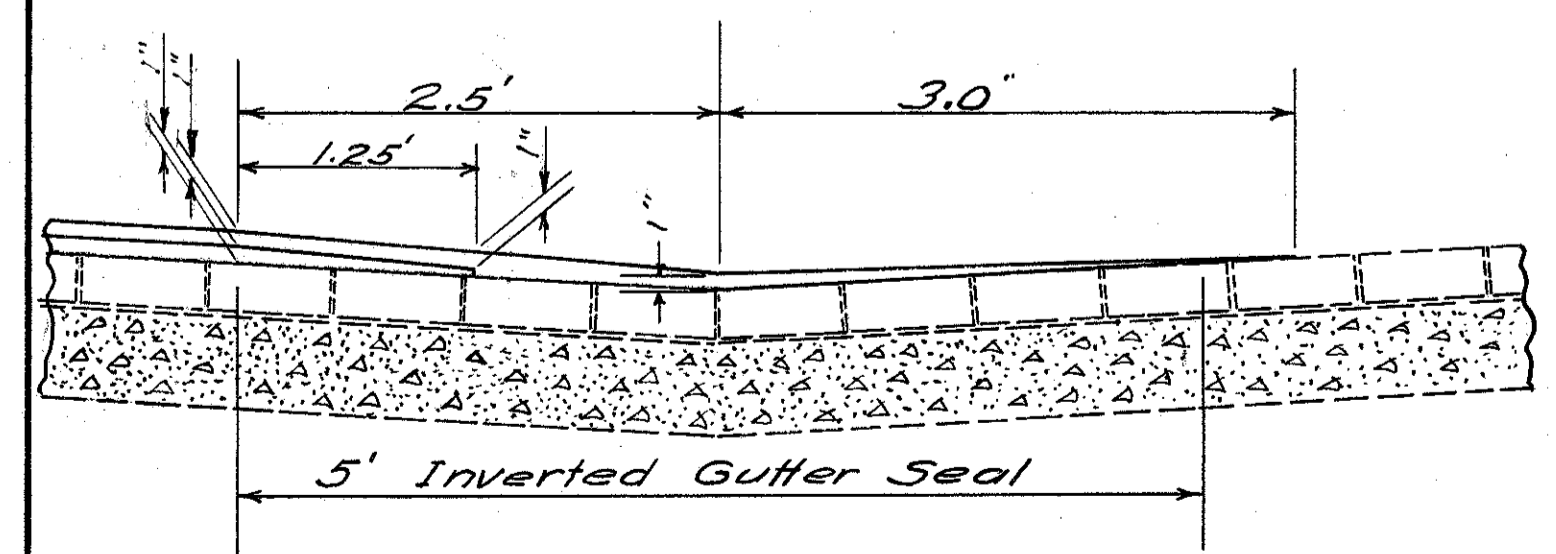
Station 41+29 to Station 45+46.5 = 417.5 Lin. Ft.

- ① Item T-30, Bituminous Prime Coat using Bituminous Material, Federal Specifications 55-A-674 with Amend 1, Type II, applied at the rate of 0.10 Gal. per Sq. Yd. including sand cover.
- ② Item B-35, 1" Minimum Thickness, Asphaltic Concrete Leveling Course.
- ③ Item T-35, 1" Asphaltic Concrete Surface Course, Type "B"

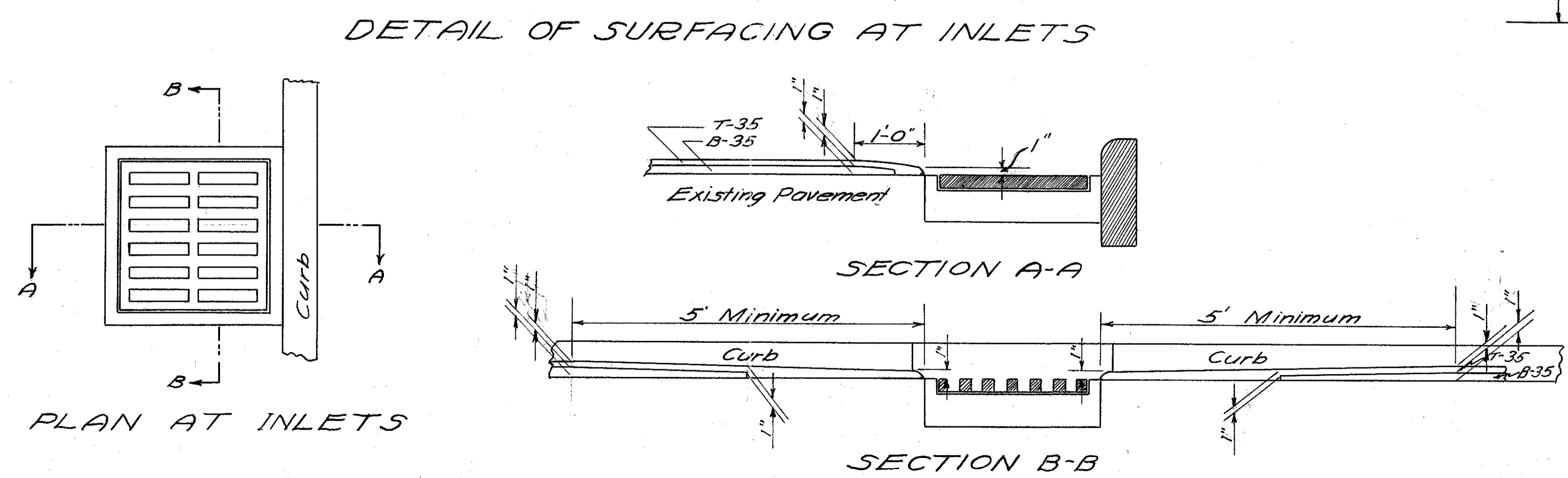


DETAIL OF COMBINED CURB AND GUTTER

Note: 500 Lin. Ft. Estimated to replace unsuitable curb and gutter. (See General Notes)



DETAIL AT EDGE OF SURFACING
 Sta 41+29 to Sta 45+46.5



DETAIL OF SURFACING AT INLETS

PLAN AT INLETS

SECTION A-A

SECTION B-B

TYPICAL SECTIONS

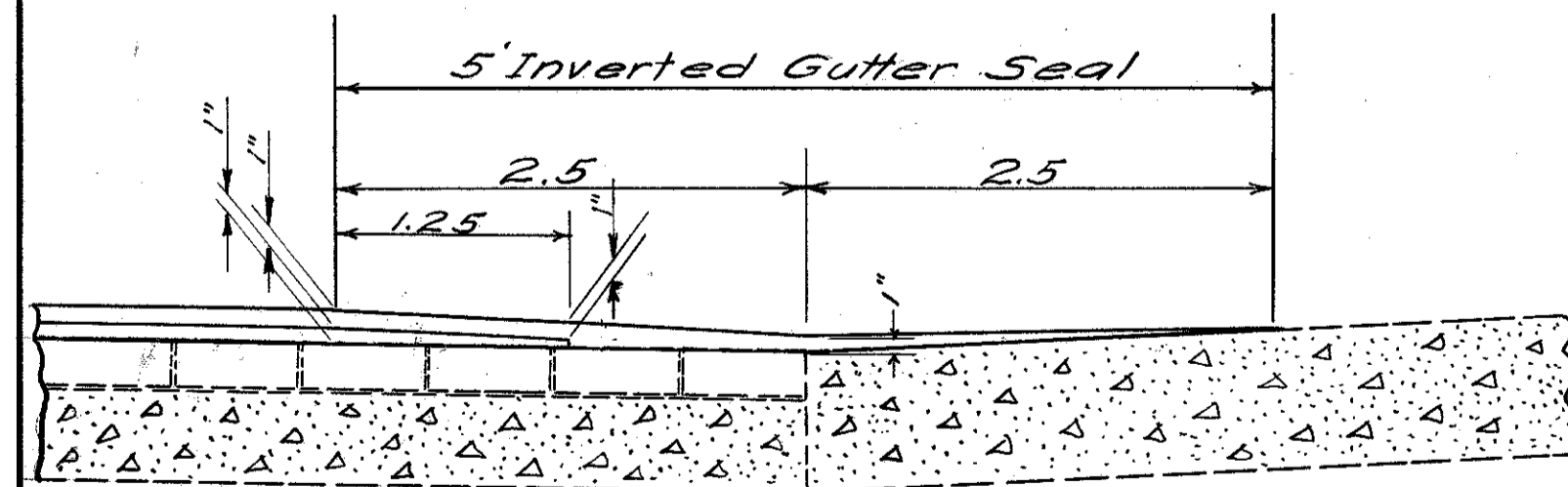
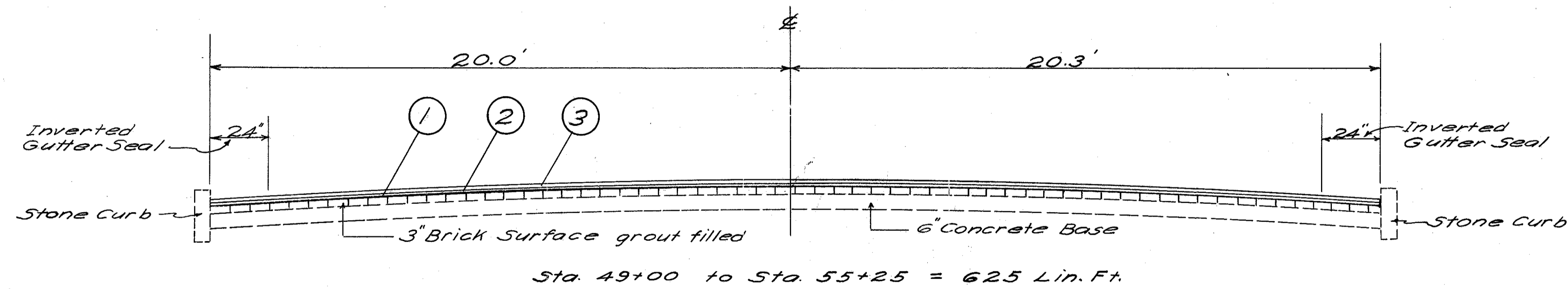
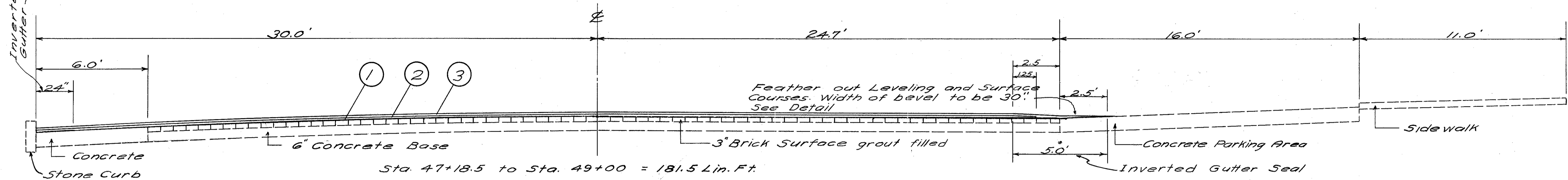
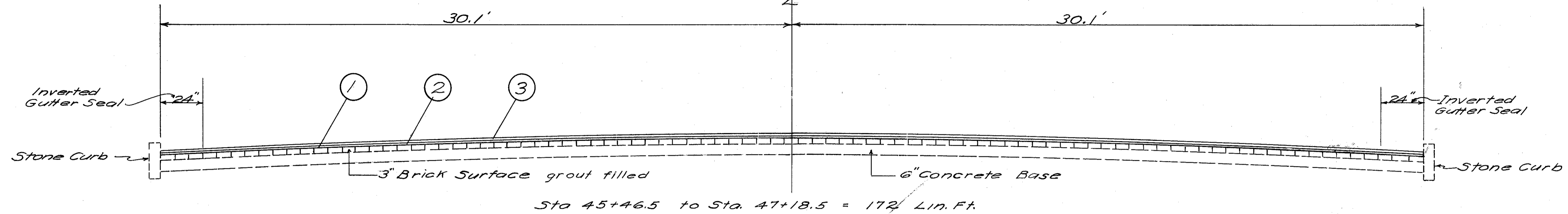
FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1943

4
17

WILLIAMS COUNTY
S.H. 309 Sec. BRYAN (pt)
S.H. 310 Sec. BRYAN (pt)

TYPE T-35

SCALE 3/8" = 1'



DETAIL AT EDGE OF SURFACING
Sta 47+18.5 to Sta 49+00

- ① Item T-30, Bituminous Prime Coat using Bituminous Material, Federal Specification SS-A-67A with Amend 1, Type II, applied at the rate of 0.10 Gal. per sq. yd. including sand cover.
- ② Item B-35, 1" Minimum Thickness, Asphaltic Concrete Leveling Course.
- ③ Item T-35, 1" Asphaltic Concrete Surface Course, Type "B"

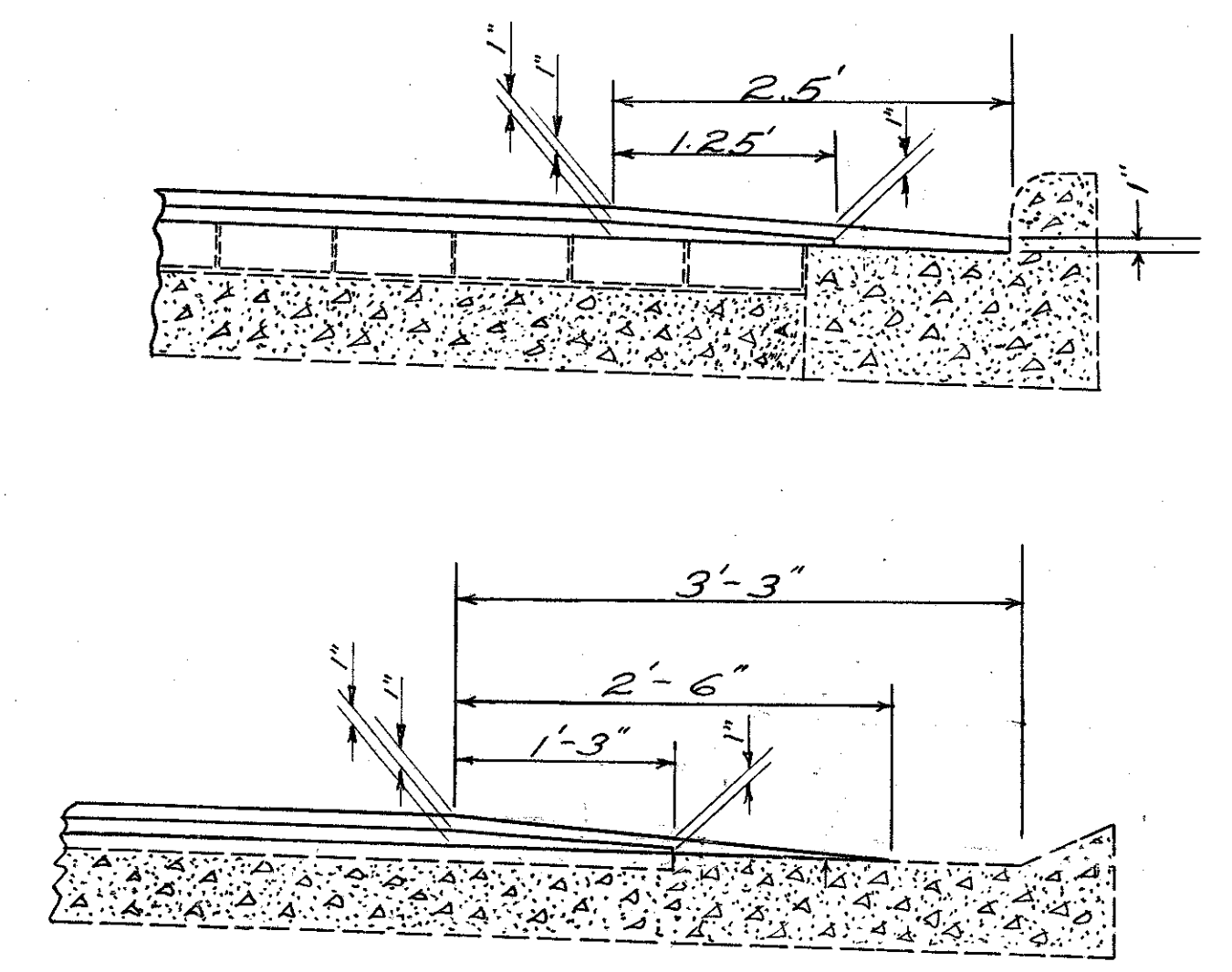
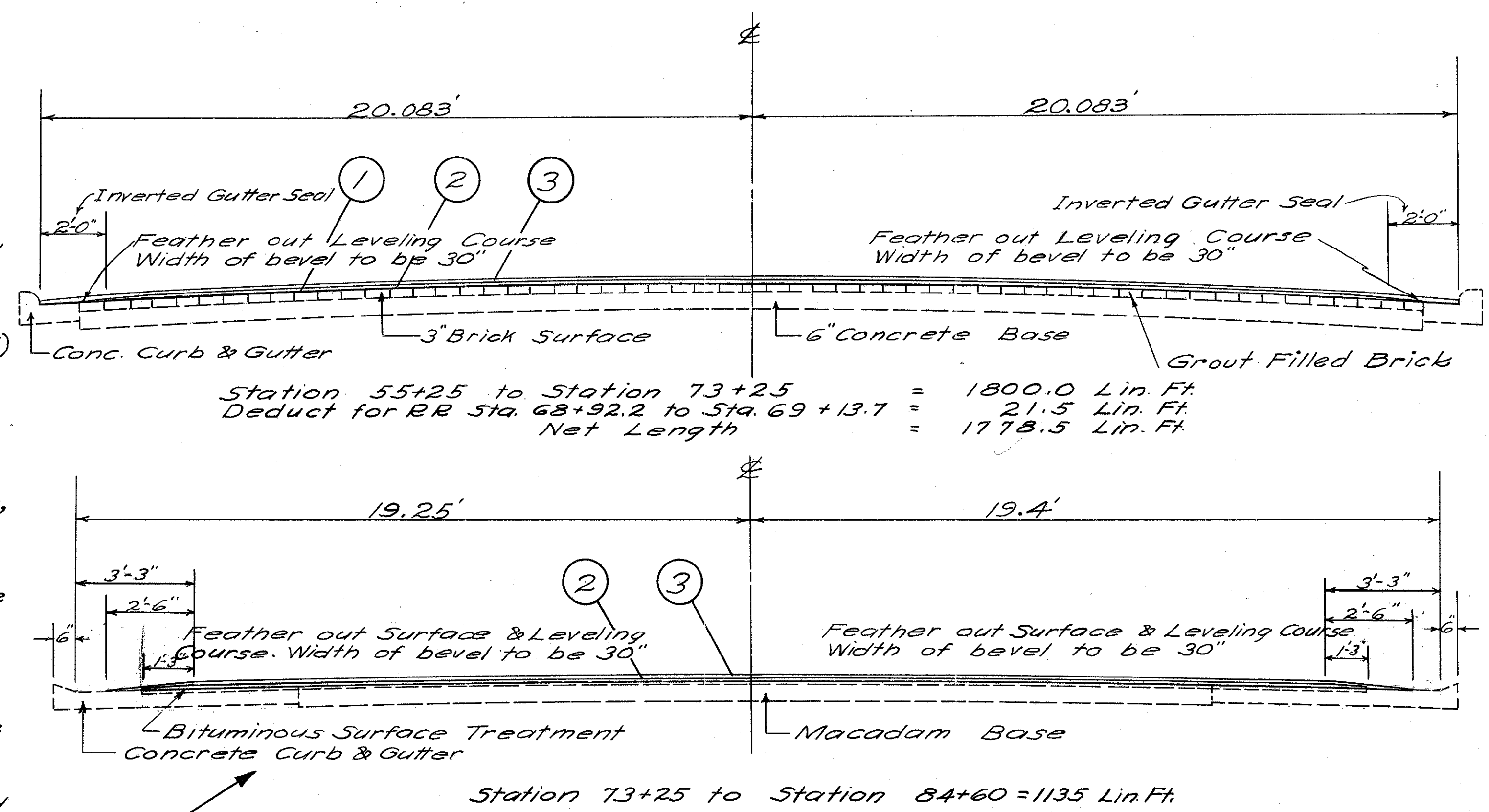
GENERAL NOTES

TYPICAL SECTIONS

TYPE T-35

SCALE 7/8"=1'

- TRAFFIC:** Traffic shall be maintained at all times to the satisfaction of the Director. The item of "Maintaining traffic" shall include furnishing lights, signs, barricades and watchmen necessary to secure the unimpeded flow of traffic twenty four hours daily.
- PROFILE:** The profile of the proposed surface course shall be approximately 2" above that of the existing pavement.
- PRIME COAT:** It will be necessary to use a Prime Coat Item T-30 on the existing brick pavement as shown on Typical Sections. "Bituminous Prime Coat, Federal Specification 55-A-674 with Amend. 1, Type II shall be applied by distributor or by brooms at the rate of 0.10 gallon per square yard. After the bituminous material has been applied, all material not required to give a uniform coating to the surface shall be swept into all cracks and open joints before the sand cover is placed. (Payment for sand cover is included in price bid per gallon for bituminous material.) Sand cover shall be uniformly spread at the rate of two to five pounds per square yard at such time and shall be in such condition as to adhere to the bituminous material."
- SEALING EXISTING EDGES:** Vertical faces of existing work, such as pavements, castings, curbs, etc., against which the new bituminous concrete mixture is to be placed, shall be painted or sealed with the same bituminous material as used in the mixture which shall be applied at a temperature of 300 deg. F. to 350 deg. F., before placing the mixture. The cost of such operations and material shall be included in the price bid for surface course.
- GUTTER SEAL:** Prior to placing any asphaltic concrete, but after thorough cleaning, the existing gutter surface shall be sealed with the same bituminous material contained in the mixture. Only enough material shall be applied to coat the surface for a distance of twenty four inches from the curb or sixty inches wide for a "V" gutter. The material shall be applied by an approved method at a temperature of from 300 deg. F. to 350 deg. F. The cost of such operation and material shall be included in the price bid for surface course.
- BITUMINOUS CONCRETE BASE COURSE:** Base course may be constructed of Type "A" composition.
- RAILROAD CROSSING:** The new surface course shall be feathered to meet the rail grades if necessary.
- FEATHERING:** Before placing the asphaltic concrete, a paint coat of the same bituminous material used in the mix shall be applied to the area of existing pavement under the area to be feather edged. Payment for this paint coat is to be included in the unit price bid for the asphaltic concrete.
- CLEANING EXISTING PAVEMENT:** As a part of the work required by Sec. T-35.16, The Contractor shall remove all accumulations of material built up at joints or cracks before spreading any bituminous material.
- LEVELING COURSE:** Whenever the depth of the leveling course exceeds 2 inches, the leveling material below the minimum thickness specified on the plan shall be spread and compacted in one or more courses. No course shall exceed three (3) inches in depth when compacted.
- EXTRA LEVELING MATERIAL:** It is estimated that it will require 200 Cu. Yds. per mile of Leveling Material in addition to the 1" Minimum Thickness Leveling Course for this project. This additional material shall be used to strengthen existing pavement and remove surface variations (at various stations). Additional material shall also be used to increase crown on section Sta. 73+25 to Sta. 84+60.



DETAIL OF SURFACING AT CURBS
Sta 55+25 to Sta. 84+60

Note - Build more crown into pavement, Sta. 75+25 to Sta. 84+60, by using extra leveling in center. (See Note on use of EXTRA LEVELING MATERIAL)

- ① Item T-30, Bituminous Prime Coat using Bituminous Material, Federal Specification 55-A-674 with Amend 1, Type II, applied at the rate of 0.10 Gal. per Sq. Yd. including sand cover.
- ② Item B-35, 1" Minimum Thickness, Asphaltic Concrete Leveling Course.
- ③ Item T-35, 1" Asphaltic Concrete Surface Course, Type "B"

RESETTING CASTINGS: This item shall be performed at completion of the leveling course and prior to placing the surface course.

UTILITIES: All work required to relocate or adjust, etc. all Gas, Water, Telephone and (or) Telegraph, Electric and other services encountered during progress shall be completed by the Utilities in question or the Corporation of Bryan except as otherwise provided by the plan and estimate.

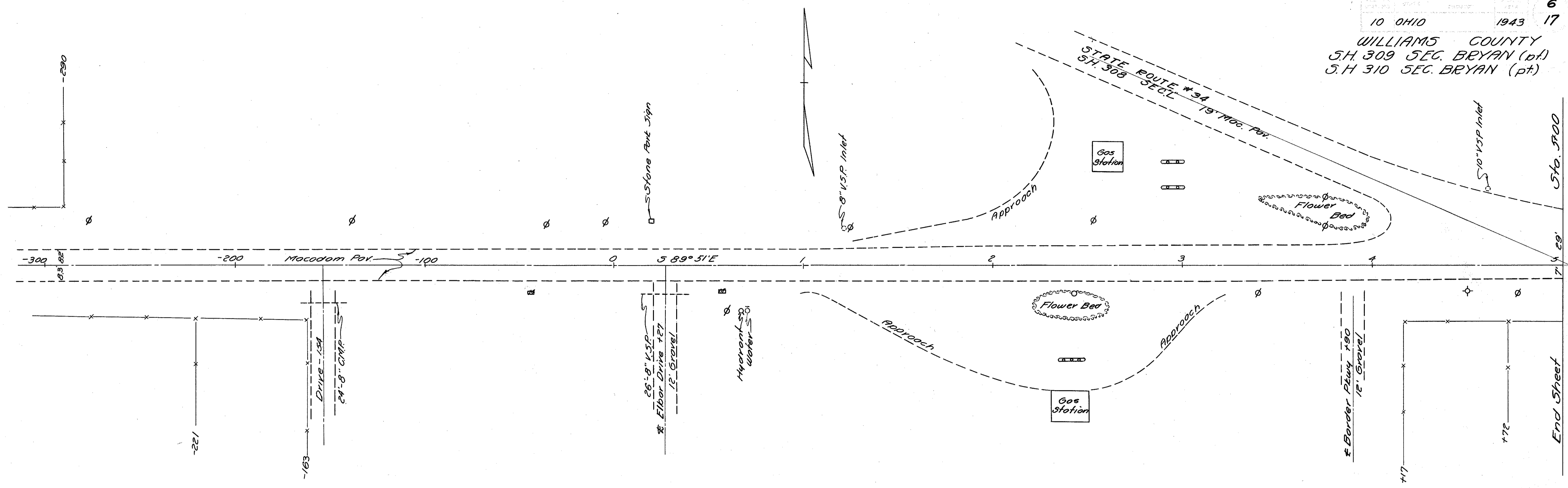
COMBINATION CURB & GUTTER (As per Detail) and 6" x 18" CONCRETE CURB (Type-G Std. Dwg. I-12)
At various stations throughout length of Project it will be necessary to remove and replace unsatisfactory sections of existing Combined Curb and Gutter and separate Curb. The locations and lengths of the various Sections to be removed and replaced shall be as indicated by the Director. All stone curb removed shall be stored, as directed, for disposal by City of Bryan. All concrete curb or combined curb and gutter removed shall be disposed of by Contractor.

COMPACTION OF SUBGRADE: Loosening and watering of subgrade at areas for pavement replacement or on widening (Approach 10-P Sheet 12), according to Section E-1.11 will not be required if density requirements can be met by additional rolling or tamping, however, if at any time the subgrade contains an excess of moisture as indicated by distortion, the subgrade shall be aerated by suitable means until the moisture content has been reduced sufficiently to permit recompaction to the density required by the specifications.

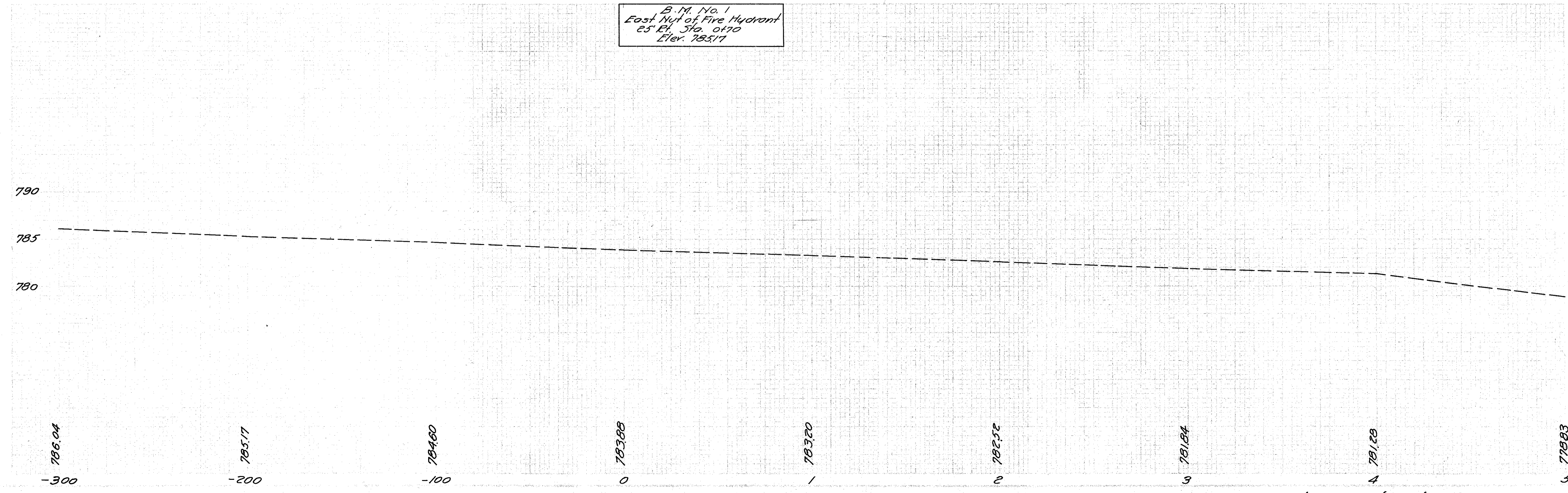
FORMS: Side Forms set and maintained to line and grade established by Engineer will be required on the pavement widening on Approach 10-P, Sheet 12. Subgrade for Forms shall be compacted to the density required for subgrade under widening's.

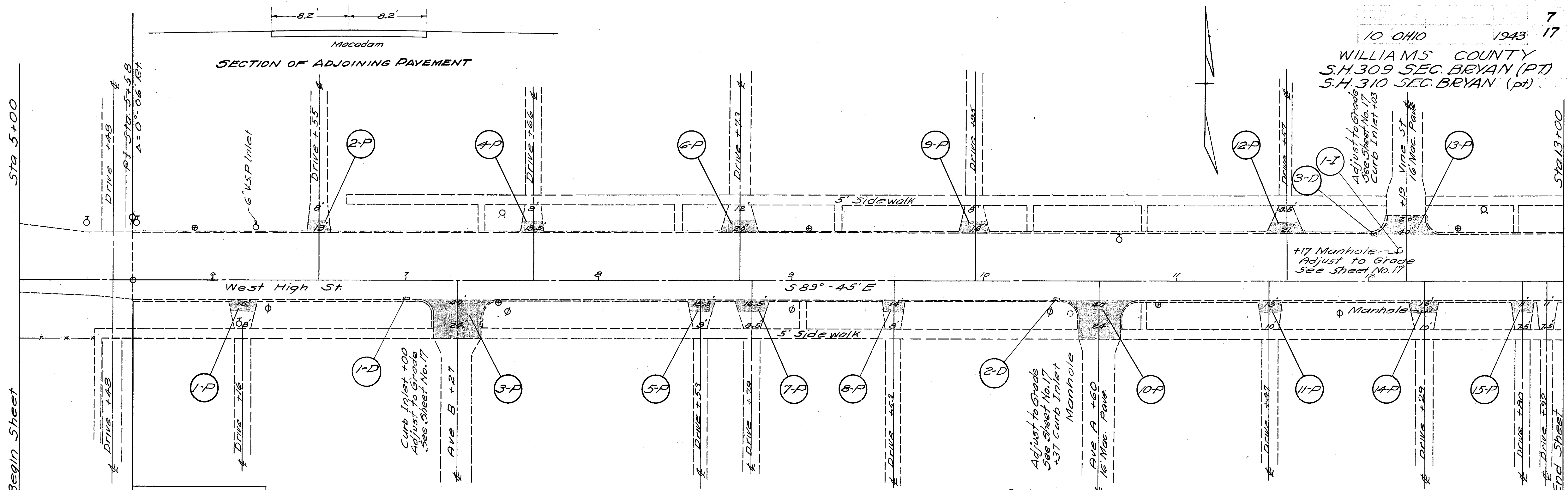
Special care shall be taken during construction to obtain maximum compaction of the bituminous concrete in all gutters.

WILLIAMS COUNTY
 S.H. 309 SEC. BRYAN (pt.)
 S.H. 310 SEC. BRYAN (pt.)



B.M. No. 1
 East Nut of Fire Hydrant
 25' E. Sta. 0470
 Elev. 785.17





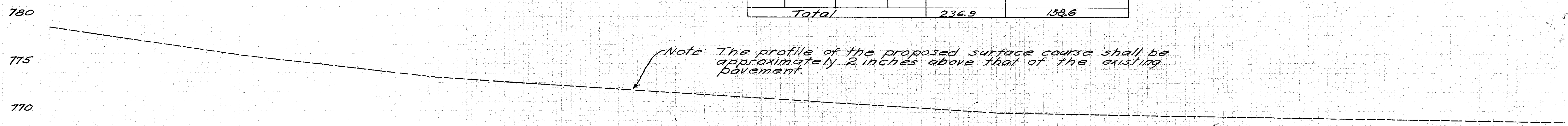
Sta. 5+58
Begin Project

B.M. No. 2
S.E. Nut of Fire Hydrant
30' Lt. of Sta. 7+50
Elevation 715.36

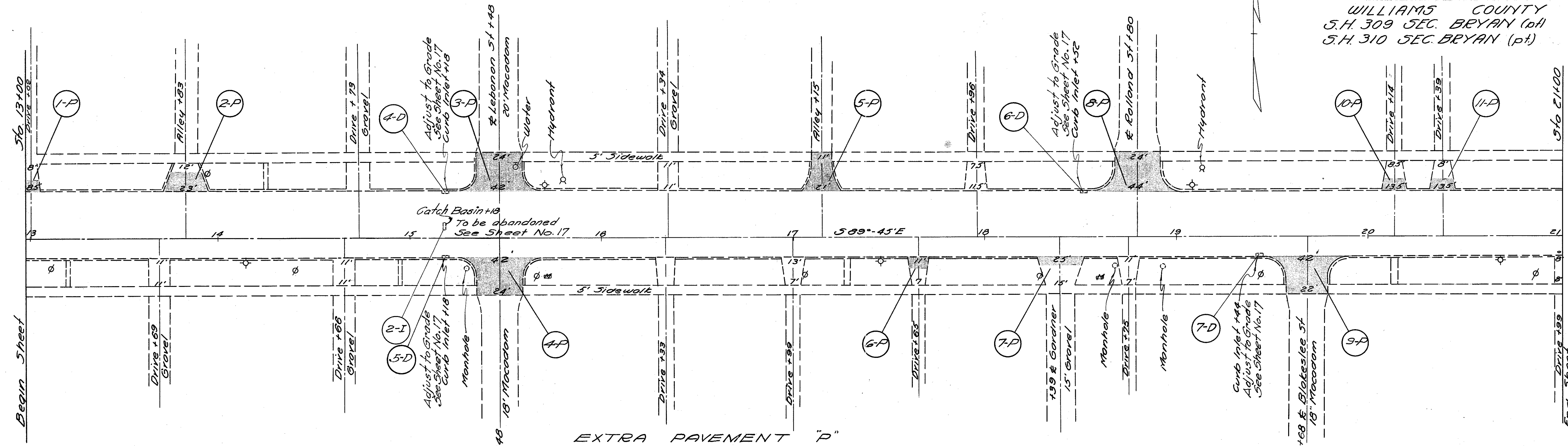
B.M. No. 3
S. Nut of Fire Hydrant
30' Lt. of Sta. 12+40
Elev. 711.10

EXTRA PAVEMENT "P"

Ref. No.	Station From	Station To	Side	T-35 Surface Course Sq. Yds.	B-35 Leveling Course Sq. Yds.
1-P	6+16		Rt.	7.7	4.7
2-P	6+55		Lt.	7.0	4.6
3-P	7+27		Rt.	56.4	37.7
4-P	7+66		Lt.	7.5	5.1
5-P	8+53		Rt.	8.2	5.6
6-P	8+73		Lt.	10.7	7.0
7-P	8+79		Rt.	8.3	5.1
8-P	9+53		Rt.	7.3	5.0
9-P	9+95		Lt.	8.0	5.0
10-P	10+60		Rt.	36.4	37.7
11-P	11+47		Rt.	7.7	5.3
12-P	11+57		Lt.	9.8	6.3
13-P	12+19		Lt.	27.0	19.7
14-P	12+29		Rt.	8.7	5.7
15-P	12+80		Rt.	6.2	3.9
Total				236.9	158.6



Note: The profile of the proposed surface course shall be approximately 2 inches above that of the existing pavement.



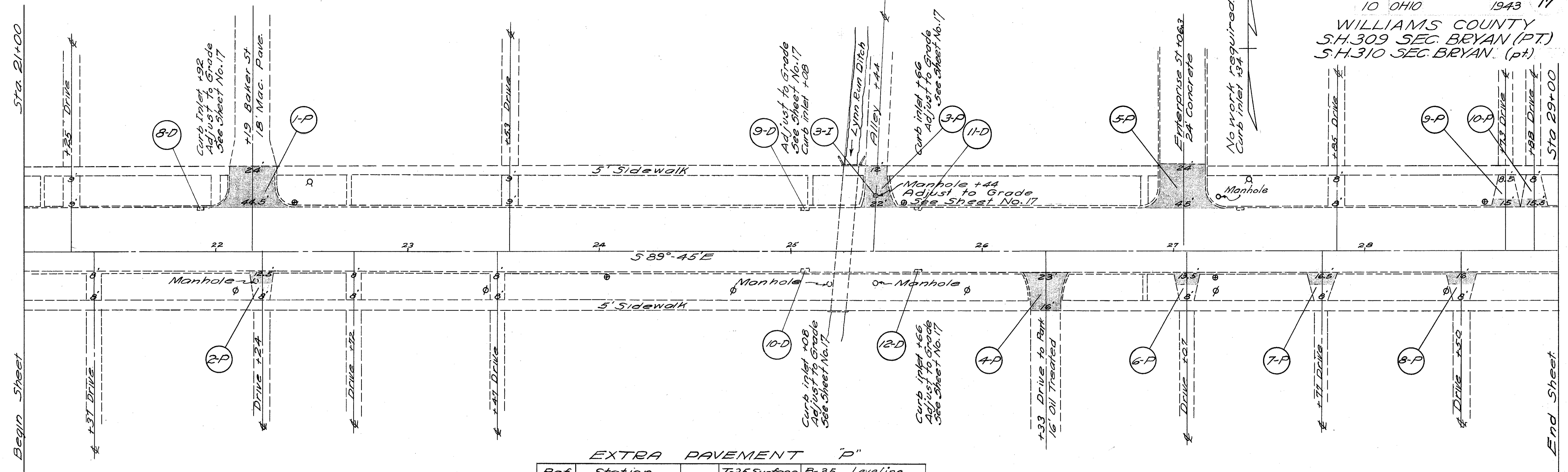
EXTRA PAVEMENT "P"

Ref No	Station		Side	T-35 Surface Course Sq. Yds.	B-3.5 Leveling Course Sq. Yds.
	From	To			
1-P	13+02		Lt.	5.5	3.7
2-P	13+83		Lt.	19.4	13.3
3-P	15+48		Lt.	57.2	38.5
4-P	15+48		Rt.	57.2	38.5
5-P	17+15		Lt.	35.6	27.0
6-P	17+65		Rt.	6.0	3.9
7-P	18+39		Rt.	2.0	3.3
8-P	18+80		Lt.	58.1	39.4
9-P	19+68		Rt.	53.7	36.6
10-P	20+14		Lt.	7.3	4.7
11-P	20+39		Lt.	7.2	4.6
Total				316.2	216.0

B.M. No. 4
 South of Fire Hydrant
 35' N of Sta 19+12
 Elev. 769.39

Note: The profile of the proposed surface course shall be approximately 2 inches above that of the existing pavement.

770.0
 765.0
 13 768.76
 14 769.42
 15 768.10
 16 767.58
 17 767.01
 18 766.46
 19 765.92
 20 766.36
 21 765.98



EXTRA PAVEMENT "P"

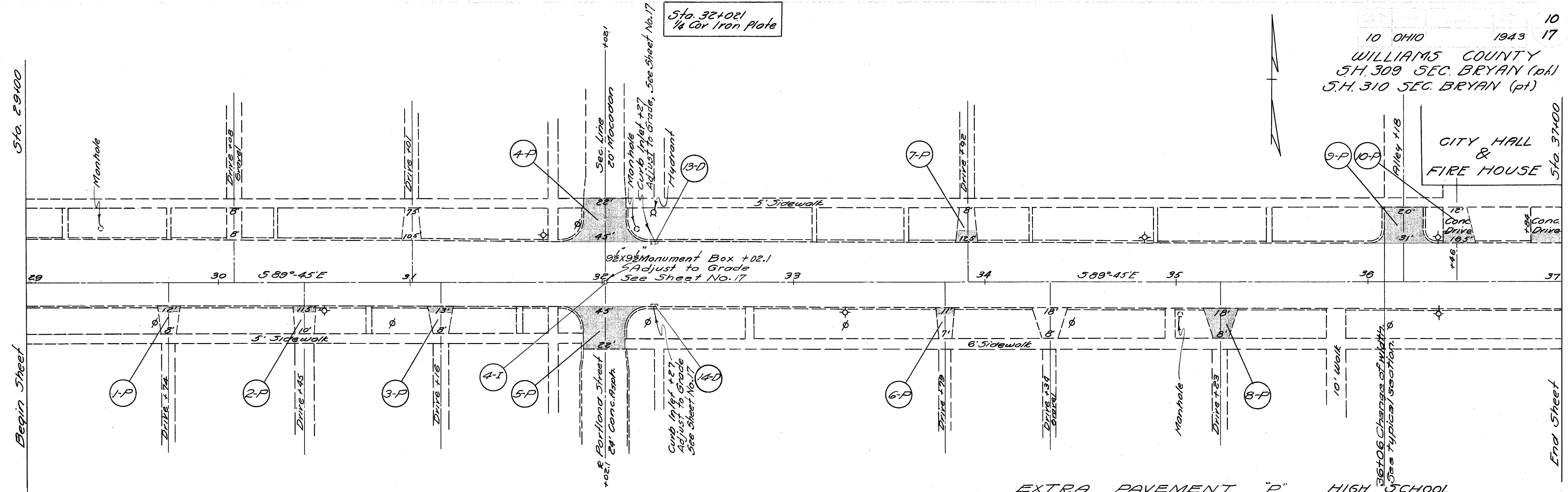
Ref No	Station		Side	T-35 Surface Course Sq. Yds.	B-35 Leveling Course Sq. Yds.
	From	To			
1-P	22+19		Lt.	61.0	42.3
2-P	22+24		Rt.	6.8	4.4
3-P	25+44		Lt.	40.6	31.3
4-P	26+33		Rt.	43.3	30.9
5-P	27+06.3		Lt.	65.2	44.7
6-P	27+07		Rt.	7.2	4.8
7-R	27+77		Rt.	3.2	5.5
8-P	28+50		Rt.	8.0	5.1
9-P	28+75		Lt.	5.2	3.2
10-P	28+88		Lt.	5.2	3.2
Total				250.7	173.4

BM. No. 5
 SW. cor. of walk at curb
 24' Lt. of Sta. 26+85
 Elevation 763.94

Note: The profile of proposed surface course shall be approximately 2 inches above that of the existing pavement.

770
 765
 760

21 765.98
 22 765.71
 23 765.42
 24 765.17
 25 764.95
 26 764.84
 27 764.13
 28 764.79
 29 765.39
 Sta. 21+00 to Sta. 29+00



Sta. 32+02.1
 1/4 Cor Iron plate

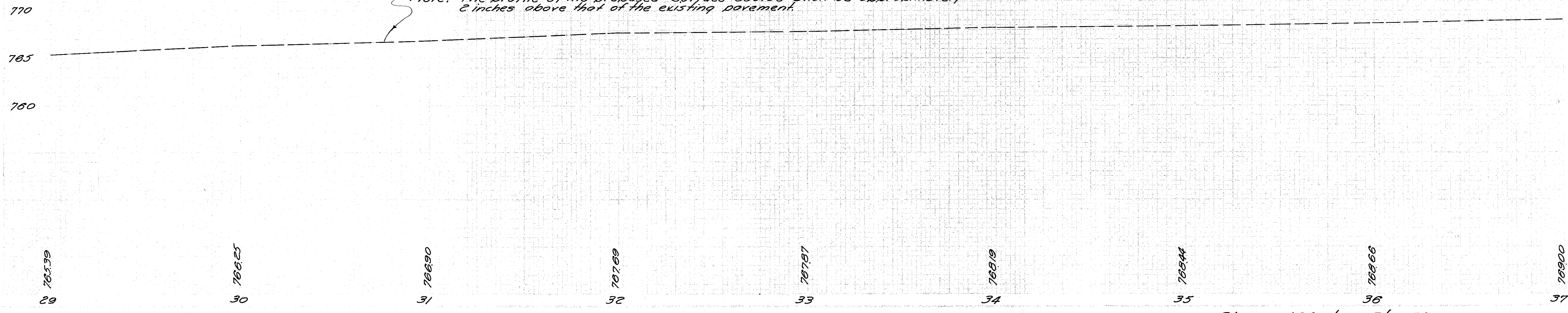
CITY HALL
 &
 FIRE HOUSE

EXTRA PAVEMENT "P" HIGH SCHOOL

Ref No	Station		Side	Course	
	From	To		T-35 Surface Course Sq.Yds.	B-35 Leveling Course Sq.Yds.
1-P	29+74		Rt.	4.0	2.8
2-P	30+45		Rt.	3.8	2.5
3-P	31+16		Rt.	4.3	3.0
4-P	32+02.1		Lt.	62.5	44.2
5-P	32+02.1		Rt.	60.1	42.3
6-P	33+79		Lt.	3.7	2.7
7-P	33+92		Rt.	7.0	4.9
8-P	35+23		Rt.	23.1	17.6
9-P	36+18		Lt.	43.7	29.7
10-P	36+46		Lt.	9.7	6.3
Total				221.9	155.9

B.M. No. 6
 NW Cor Light Standard
 15' Rt of Sta 33+87
 Elev 768.39

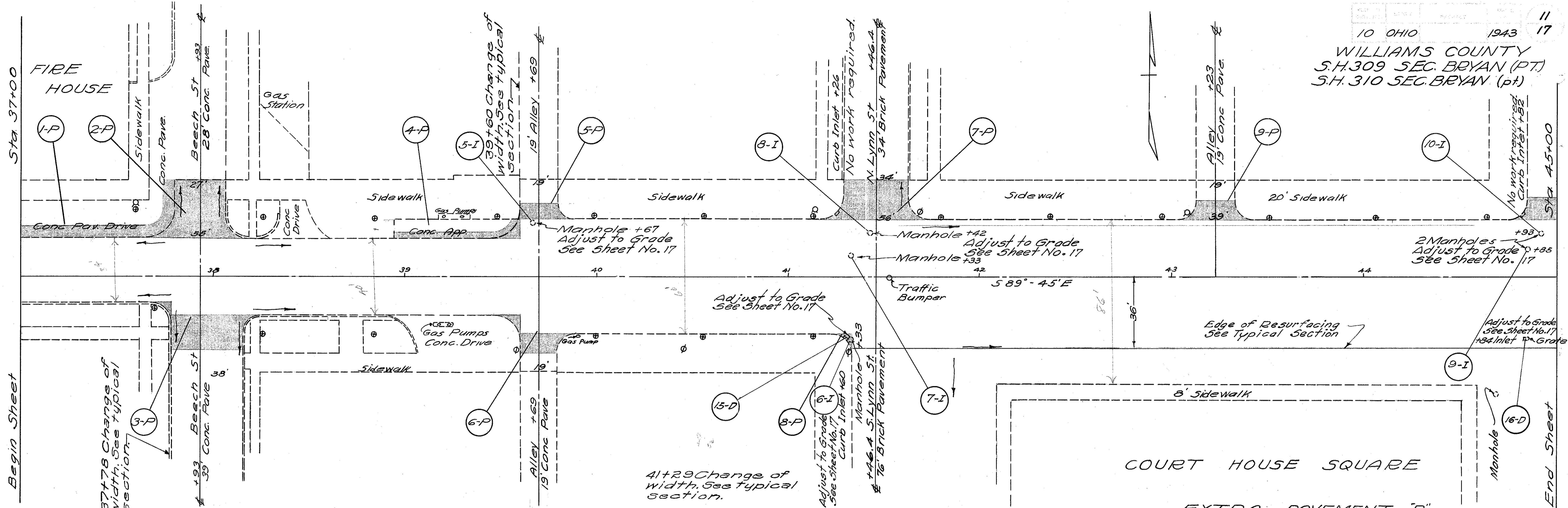
Note: The profile of the proposed surface course shall be approximately 2 inches above that of the existing pavement.



763.79 766.25 766.90 767.69 767.87 768.19 769.44 769.66 769.90

29 30 31 32 33 34 35 36 37

Sta. 29+00 to Sta 37+00

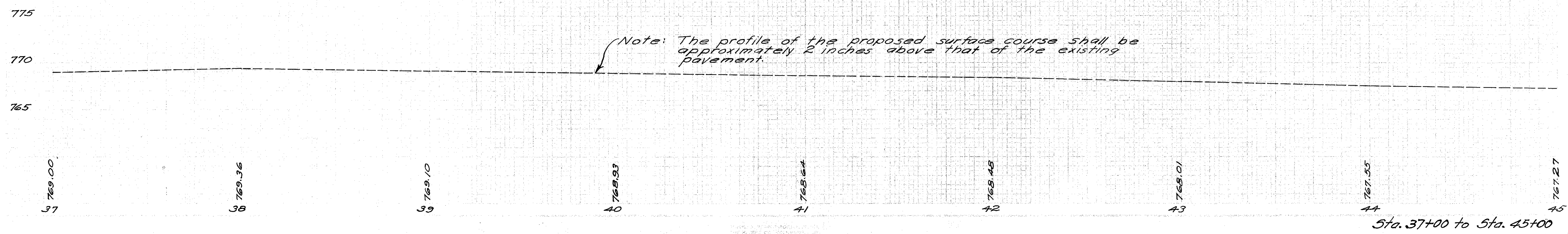


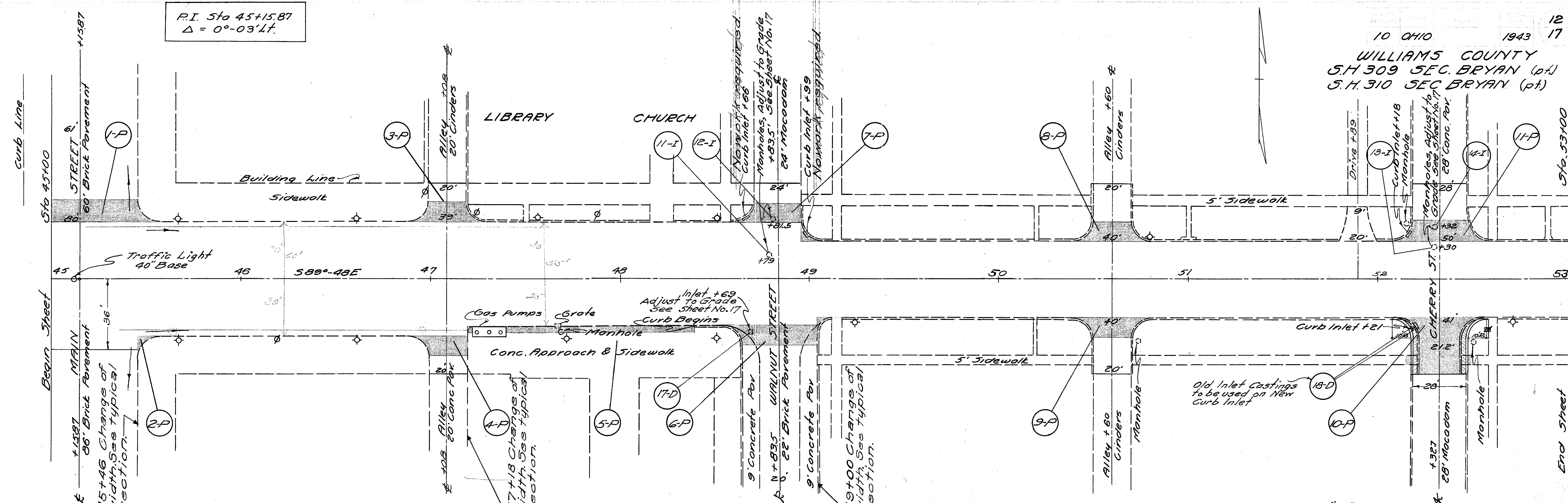
BM No 7
 N.W. Cor Pump Island
 24' Rt. of Sta 39+15
 Elevation 769.38

U.S.G.S. Bench Mark
 Iron Post
 S.W. Cor of Court House
 Elevation = 772.11

EXTRA PAVEMENT "P"

Ref. No.	Station From	To	Side	T-35 Surface Course Sq. Yds.	B-35 Leveling Course Sq. Yds.
1-P	36+84	37+79.5	Lt.	79.7	54.4
2-P	37+93		Lt.	99.3	69.3
3-P	37+93		Rt.	76.0	50.7
4-P	38+94	39+60	Lt.	22.0	13.4
5-P	39+69		Lt.	22.0	16.3
6-P	39+69		Rt.	30.5	23.5
7-P	41+46.4		Lt.	81.3	54.9
8-P	41+46.4		Rt.	1.5	1.0
9-P	43+23		Lt.	25.9	18.9
Total				438.2	302.4





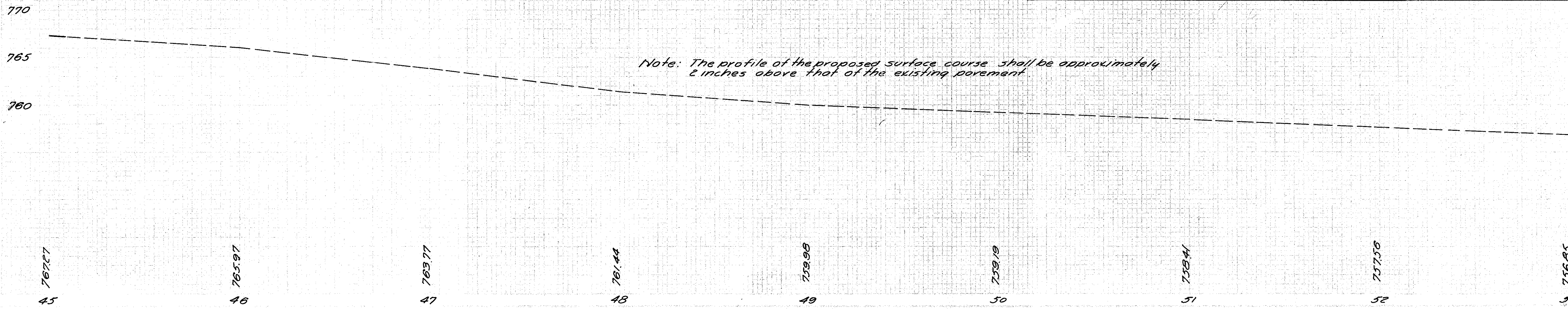
P.I. Sta 45+15.87
 $\Delta = 0^{\circ}-03'Lt.$

B.M. No. 8
 "x" in Brick Pavement
 2' Lt. of Sta 45+15
 Elev. 767.32

B.M. No. 9
 N.W. Cor. of Light Std.
 22' Rt. of Sta 49+22
 Elev. 760.01

EXTRA PAVEMENT "P"

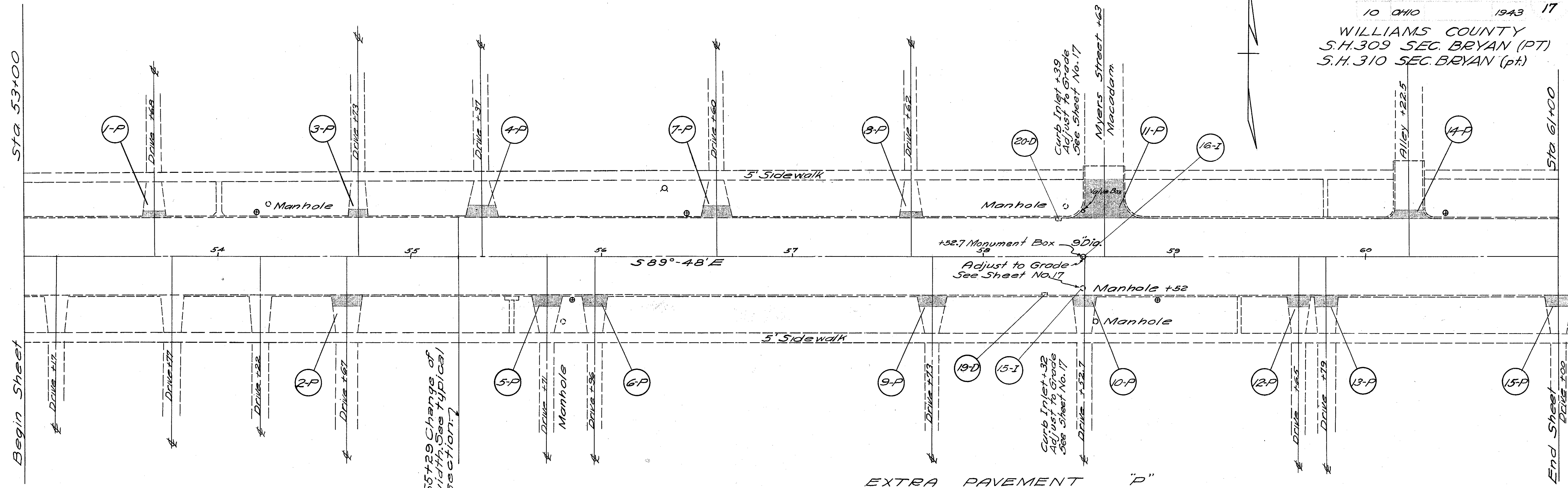
Ref No	Station From	Station To	Side	7-3.5 Surface Course Sq. Yds.	B-3.5 Leveling Course Sq. Yds.	B-3.5 Base Course Sq. Yds.	E-1 Excavation Cu. Yds.	E-2 Remove & Store, Curb Lin. Ft.	E-3 Remove Conc. New Conc. Side Walk Sq. Ft.	F-13 New Conc. Side Walk Sq. Ft.	T-20 Insulation Course Sq. Yds.	T-12 Curb Lin. Ft.
1-P	45+15.87		Lt.	72.5	46.7							
2-P	45+15.87		Rt.	2.4	2.0							
3-P	47+08		Lt.	27.0	19.2							
4-P	47+08		Rt.	24.6	16.8							
5-P	47+18	48+39	Rt.	40.3	26.9							
6-P	48+33.5		Rt.	50.8	36.0							
7-P	48+33.5		Lt.	31.4	22.6							
8-P	50+60		Lt.	27.0	19.7							
9-P	50+60		Rt.	27.0	19.7							
10-P	52+32.7		Rt.	98.6	67.5	21	6	72	60	26	21	72
11-P	52+32.7		Lt.	40.0	28.5							
Total				441.6	305.6	21	6	72	60	26	21	72



767.27 765.97 763.77 761.44 759.98 758.19 756.41 754.58 752.78 750.85

45 46 47 48 49 50 51 52 53

Sta 45+00 to Sta. 53+00

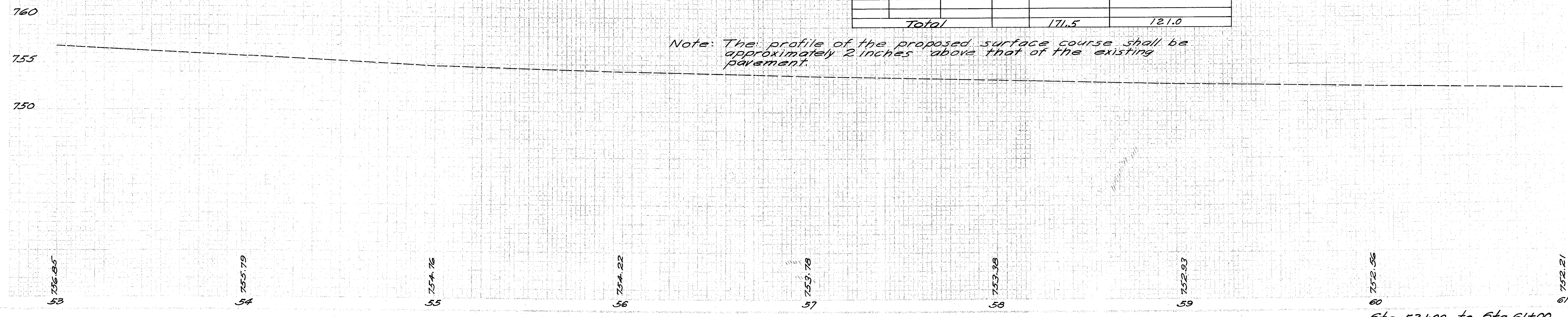


B.M. No. 10
 N.W. Cor of Light Standard
 22' Rt of Sta 55+85
 Elevation 754.52

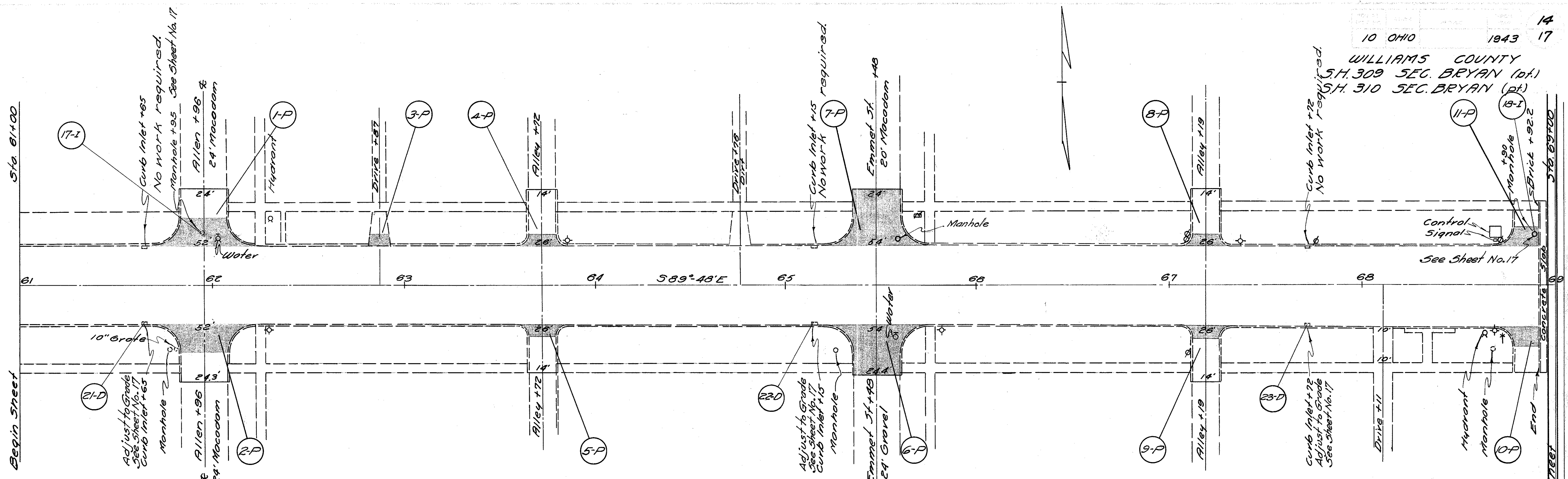
EXTRA PAVEMENT "P"

Ref No	Station From	To	Side	T-35 Surface Course Sq Yds	B-35 Leveling Course Sq. Yds.
1-P	53+68		Lt.	4.0	2.7
2-P	54+67		Rt.	10.7	7.4
3-P	54+73		Lt.	4.4	2.9
4-P	55+37		Lt.	11.3	8.0
5-P	55+71		Rt.	10.3	7.2
6-P	55+96		Rt.	9.0	6.3
7-P	56+60		Lt.	10.7	7.6
8-P	57+62		Lt.	4.0	2.7
9-P	57+73		Rt.	10.7	7.6
10-P	58+52.7		Rt.	8.7	6.0
11-P	58+63		Lt.	50.3	35.4
12-P	59+65		Rt.	8.3	5.9
13-P	59+79		Rt.	8.3	5.6
14-P	60+22.5		Lt.	11.1	8.9
15-P	61+00		Rt.	9.7	6.8
Total				171.5	121.0

Note: The profile of the proposed surface course shall be approximately 2 inches above that of the existing pavement.



WILLIAMS COUNTY
S.H. 309 SEC. BRYAN (pt.)
S.H. 310 SEC. BRYAN (pt.)

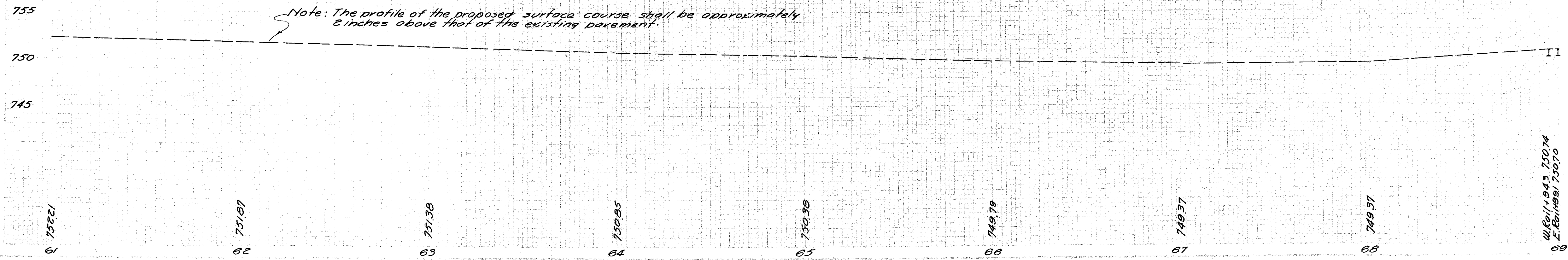


B.M. No. 11
N.W. cor. of Light Standard
22' Rt. of Sta. 62+30
Elev 752.20

B.M. No. 12
N.W. cor. of Light Standard
22' Rt. of Sta. 68+70
Elev 750.51

EXTRA PAVEMENT "P"

Ref No	Station From TO	Side	T-35 Surface Course Sq Yds	B-35 Leveling Course Sq Yds.
1-P	61+96	Lt.	46.7	33.1
2-P	61+96	Rt.	47.1	33.5
3-P	62+87	Lt.	7.3	5.1
4-P	63+72	Lt.	11.1	8.0
5-P	63+72	Rt.	11.1	8.0
6-P	65+48	Rt.	81.2	57.6
7-P	65+48	Lt.	90.7	64.0
8-P	67+19	Lt.	11.1	8.0
9-P	67+19	Rt.	11.1	8.0
10-P	68+35.6	Rt.	17.1	12.3
11-P	68+35.6	Lt.	17.1	12.3
Total			351.6	249.9



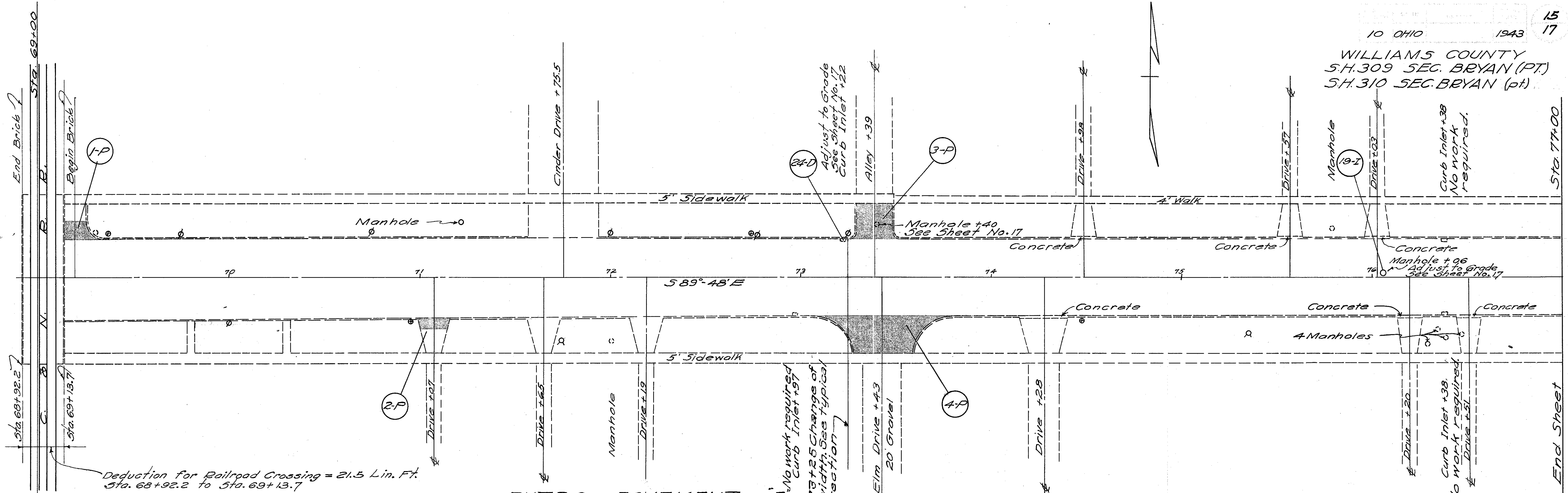
Note: The profile of the proposed surface course shall be approximately 2 inches above that of the existing pavement.

Sta. 61+00 to Sta. 69+00

W. Fol: 1943 750.74
E. Fol: 1941 750.70

C. N. E. E.

WILLIAMS COUNTY
S.H. 309 SEC. BRYAN (PT.)
S.H. 310 SEC. BRYAN (PT.)



Deduction for Railroad Crossing = 21.5 Lin. Ft.
Sta. 68+92.2 to Sta. 69+13.7

EXTRA PAVEMENT "P"

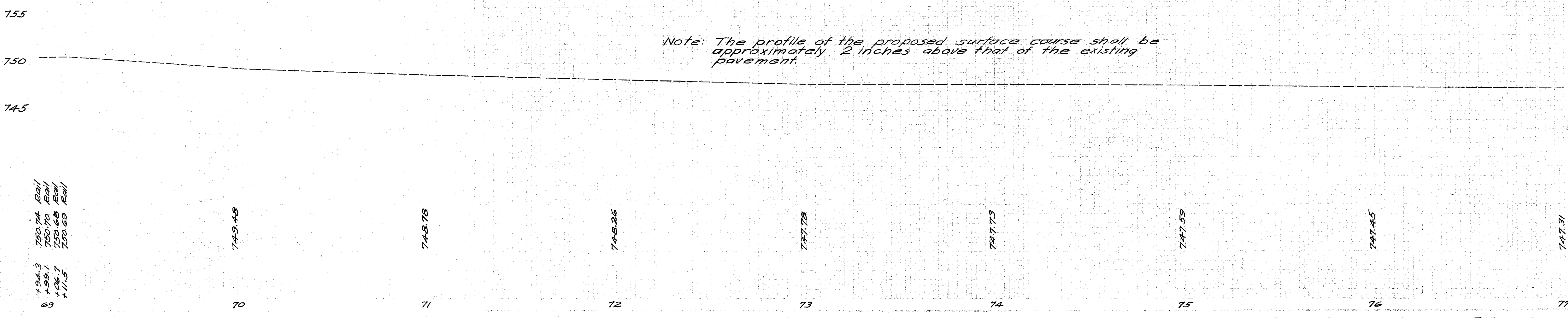
Ref No	Station From	Station To	Side	T-35 Surface Course Sq Yds	B-3.5 Leveling Course Sq Yds
1-P	69+13.2		Lt.	15.3	11.3
2-P	71+07		Rt.	11.3	8.1
3-P	73+39		Lt.	39.6	26.5
4-P	73+43		Rt.	89.9	66.8
Total				156.1	112.7

B.M. No 13
x on top of curb
20' Rt. of sta 74+48
Elevation 747.57

No work required
Curb Inlet +97
75' ± 2.5 Change of
width. See typical
section

No work required
Curb Inlet +38
No work required
Drive +51

Note: The profile of the proposed surface course shall be approximately 2 inches above that of the existing pavement.



+194.3
+199.1
+06.7
+11.5

749.45

748.78

748.26

747.78

747.73

747.59

747.45

747.31

WILLIAMS COUNTY
SH. 309 Sec. BRYAN (pt.)
SH. 310 Sec. BRYAN (pt.)

PAVEMENT COMPUTATIONS

Net Length of Typical Section	34.17'	width =	3048	Lin. Ft.
Net Length of Typical Section	34.3'	width =	172	Lin. Ft.
Net Length of Typical Section	40'	width =	182	Lin. Ft.
Net Length of Typical Section	60'	width =	169	Lin. Ft.
Net Length of Typical Section	66'	width =	417.5	Lin. Ft.
Net Length of Typical Section	60.2'	width =	172	Lin. Ft.
Net Length of Typical Section	57.2'	width =	181.5	Lin. Ft.
Net Length of Typical Section	40.3'	width =	625	Lin. Ft.
Net Length of Typical Section	40.17'	width =	1778.5	Lin. Ft.
Net Length of Typical Section	38.65'	width =	1135	Lin. Ft.
Net Length of Project			7880.5	Lin. Ft.
			1.492	Miles

Item E-8, Removal and Disposal of Existing Bituminous Surface Course (Sta 5+58 to Sta. 37+78)
 $3048 \times 34.17 \div 9 = 11572.2$ Sq. Yds.
 $172 \times 34.3 \div 9 = 655.5$ Sq. Yds.
Total = 12227.7 Sq. Yds.
 Use 12228 Sq. Yds.

Item E-8, Removal and Disposal of Existing Pavement (Brick Surface and Concrete Base)
 Estimated Area = 800 Sq. Yds.

Item E-10, Cutting and Sealing of Existing Pavement Edge
 Estimated Length = 2000 Lin. Ft.

Item I-20, 5" Insulation Course (Coarse Graded Type)
 Estimated Area and From Table "P" = 821 Sq. Yds.

Item B-35, 3" Asphaltic Concrete Base Course Type "A"
 $821 \times 3 \div 36 = 68.4$ Cu. Yds.
 Use 69 Cu. Yds.

Item T-30, Bituminous Prime Coat.
 Rate = 0.10 Gal. per sq. yd.
 $3048 \times 34.17 \div 9 \times .10 = 1157.2$ Gal.
 $172 \times 34.3 \div 9 \times .10 = 65.6$ Gal.
 $182 \times 40 \div 9 \times .10 = 80.9$ Gal.
 $169 \times 60 \div 9 \times .10 = 112.7$ Gal.
 $417.5 \times 66 \div 9 \times .10 = 306.2$ Gal.
 $172 \times 60.2 \div 9 \times .10 = 115.0$ Gal.
 $181.5 \times 57.2 \div 9 \times .10 = 115.4$ Gal.
 $625 \times 40.3 \div 9 \times .10 = 279.9$ Gal.
 $1778.5 \times 40.17 \div 9 \times .10 = 793.8$ Gal.
 From Table "P" $2680.9 \times .10 = 268.1$ Gal.
Total = 3294.8 Gal.
 Use 3295 Gal.

Item B-35, 1" Minimum Thickness Asphaltic Concrete Leveling Course
 $[3048 \times (34.17 - 5.0)] \div 9 \times 1 \div 36 = 274.5$ Cu. Yds.
 $[3048 \times 2.5 \div 9] \times [(1 + 1/2) \div 2] \div 36 = 17.6$ Cu. Yds.
 $(172 \times 34.3 \div 9) \times 1 \div 36 = 18.2$ Cu. Yds.
 $(182 \times 40 \div 9) \times 1 \div 36 = 22.5$ Cu. Yds.
 $(169 \times 60 \div 9) \times 1 \div 36 = 31.3$ Cu. Yds.
 $[417.5 \times (63 - 2.5)] \div 9 \times 1 \div 36 = 78.0$ Cu. Yds.
 $(417.5 \times 1.25 \div 9) \times [(1 + 1/2) \div 2] \div 36 = 1.2$ Cu. Yds.
 $(172 \times 60.2 \div 9) \times 1 \div 36 = 32.0$ Cu. Yds.
 $[181.5 \times (54.7 - 2.5)] \div 9 \times 1 \div 36 = 29.2$ Cu. Yds.
 $(181.5 \times 1.25 \div 9) \times [(1 + 1/2) \div 2] \div 36 = 0.5$ Cu. Yds.
 $(625 \times 40.3 \div 9) \times 1 \div 36 = 77.7$ Cu. Yds.
 $[1778.5 \times (40.17 - 5.0)] \div 9 \times 1 \div 36 = 193.1$ Cu. Yds.
 $[1778.5 \times 2.5 \div 9] \times [(1 + 1/2) \div 2] \div 36 = 10.3$ Cu. Yds.
 $[1135 \times (38.65 - 6.5)] \div 9 \times 1 \div 36 = 112.6$ Cu. Yds.
 $(1135 \times 2.5 \div 9) \times [(1 + 1/2) \div 2] \div 36 = 6.6$ Cu. Yds.
 From Table "P" $1870.3 \times 1 \div 36 = 52.0$ Cu. Yds.
 Extra Leveling @ 200 Cu. Yds. per mile, to be used to reduce crown, remove variations, etc. = 298.4 Cu. Yds.
Total = 1255.7 Cu. Yds.
 Use 1256 Cu. Yds.

Item T-35, 1" Asphaltic Concrete Surface Course Type "B" (Area)
 $(3048 \times 34.17 \div 9) \times 1 \div 36 = 321.5$ Cu. Yds. (11572.2 Sq. Yds.)
 $(3048 \times 2.5 \div 9) \times [(1/2 + 0) \div 2] \div 36 = 5.9$ Cu. Yds.
 $(172 \times 34.3 \div 9) \times 1 \div 36 = 18.2$ Cu. Yds. (655.5 Sq. Yds.)
 $(182 \times 40 \div 9) \times 1 \div 36 = 22.5$ Cu. Yds. (808.9 Sq. Yds.)
 $(169 \times 60 \div 9) \times 1 \div 36 = 31.3$ Cu. Yds. (1126.7 Sq. Yds.)
 $(417.5 \times 63 \div 9) \times 1 \div 36 = 81.2$ Cu. Yds. (2922.5 Sq. Yds.)
 $(417.5 \times 1.25 \div 9) \times [(1/2 + 0) \div 2] \div 36 = 0.4$ Cu. Yds.
 $(417.5 \times 3.0 \div 9) \times [(1 + 1/2) \div 2] \div 36 = 3.0$ Cu. Yds. (139.2 Sq. Yds.)
 $(172 \times 60.2 \div 9) \times 1 \div 36 = 32.0$ Cu. Yds. (1150.5 Sq. Yds.)
 $(181.5 \times 54.7 \div 9) \times 1 \div 36 = 30.6$ Cu. Yds. (1103.1 Sq. Yds.)
 $(181.5 \times 1.25 \div 9) \times [(1/2 + 0) \div 2] \div 36 = 0.2$ Cu. Yds.
 $(181.5 \times 2.5 \div 9) \times [(1 + 1/2) \div 2] \div 36 = 1.1$ Cu. Yds. (50.4 Sq. Yds.)
 $(625 \times 40.3 \div 9) \times 1 \div 36 = 77.7$ Cu. Yds. (2798.6 Sq. Yds.)
 $(1778.5 \times 40.17 \div 9) \times 1 \div 36 = 220.5$ Cu. Yds. (7938.0 Sq. Yds.)
 $(1778.5 \times 2.5 \div 9) \times [(1/2 + 0) \div 2] \div 36 = 3.4$ Cu. Yds.
 $[1135 \times (38.65 - 4.0)] \div 9 \times 1 \div 36 = 121.4$ Cu. Yds. (4369.8 Sq. Yds.)
 $(1135 \times 2.5 \div 9) \times [(1/2 + 1/2) \div 2] \div 36 = 8.8$ Cu. Yds. (504.4 Sq. Yds.)
 From Table "P" $2680.9 \times 1 \div 36 = 74.5$ Cu. Yds. (2680.9 Sq. Yds.)
Total = 1054.2 Cu. Yds. (37820.7 Sq. Yds.)
 Use 1055 Cu. Yds.

Item E-8, Removal and Disposal of Existing Concrete Curb and Gutter
 Estimated Length (At various stations) = 500 Lin. Ft.

Item I-12, Combination Curb and Gutter (as per plan)
 Estimated Length (At various stations) = 500 Lin. Ft.

Item E-8, Removal and Storage of Existing Stone Curb (Straight and Circular)
 Estimated Length (At various stations) = 178 Lin. Ft.
 From Extra Pavement Summary = 72 Lin. Ft.
Total = 250 Lin. Ft.

Item I-12, Type 6 Concrete Curb, Straight and Circular
 Estimated Length (At various stations) = 178 Lin. Ft.
 From Extra Pavement Summary = 72 Lin. Ft.
Total = 250 Lin. Ft.

DRAINAGE "D"

Ref No	Station	Side	I-2 10" Storm Sewer, under Pavement Lin. Ft.	I-8 No. 6 Catch Basins Each	I-8 Adjust Catch Basins to Grade Each	S-122 Catch Basins Abandon- ed Each
1-D	7+00	Rt.			1	
2-D	10+37	Rt.			1	
3-D	12+03	Lt.			1	
4-D	15+18	Lt.			1	
5-D	15+18	Rt.			1	
6-D	18+52	Lt.			1	
7-D	19+44	Rt.			1	
8-D	21+92	Lt.			1	
9-D	25+08	Lt.			1	
10-D	25+08	Rt.			1	
11-D	25+66	Lt.			1	
12-D	25+66	Rt.			1	
13-D	32+27	Lt.			1	
14-D	32+27	Rt.			1	
15-D	41+60	Rt.			1	
16-D	44+84	Rt.			1	
17-D	48+69	Rt.			1	
18-D	52+21	Rt.	15	1		1
19-D	58+32	Rt.			1	
20-D	58+39	Lt.			1	
21-D	61+65	Rt.			1	
22-D	65+15	Rt.			1	
23-D	67+72	Rt.			1	
24-D	73+22	Lt.			1	
Totals			15	1	23	1

GENERAL SUMMARY

ITEM	DESCRIPTION	QUANTITY	UNIT
E-1	Roadway Excavation (Unclassified)	6	Cu. Yds.
E-8	Removal and Disposal of Existing Bituminous Wearing Course	12228	Sq. Yds.
E-8	Removal and Disposal of Existing Pavement (brick surface, conc. base)	800	Sq. Yds.
E-10	Cutting and Sealing of Existing Pavement Edge	2000	Lin. Ft.
I-8	Existing Manholes, Monument Boxes and Catch Basins adjusted to grade.	41	Each
S-122	Existing Catch Basins Abandoned	2	Each
E-8	Removal and Disposal of Existing Concrete Sidewalk	60	Sq. Ft.
E-8	Removal and Storage of Existing Stone Curb	250	Lin. Ft.
E-8	Removal and Disposal of Existing Concrete Curb & Gutter	500	Lin. Ft.
I-2	10" Storm Sewers, under Pavement	15	Lin. Ft.
I-8	Standard No. 6 catch Basin (except furnishing casting)	1	Each
I-13	4" Concrete Sidewalk	26	Sq. Ft.
I-20	5" Insulation Course (Coarse Graded Type)	821	Sq. Yds.
T-35	Asphaltic concrete Surface Course Type "B"	1055	Cu. Yds.
B-35	Asphaltic Concrete Leveling Course	1256	Cu. Yds.
B-35	Asphaltic Concrete Base Course	69	Cu. Yds.
T-30	Bituminous Prime Coat, Federal Specification 55-A-67A with Amend I, Type II including sand cover	3295	Gal.
I-12	Combination Curb and Gutter (as per plan)	500	Lin. Ft.
I-12	Type 6 Concrete Curb (Straight and circular)	250	Lin. Ft.

EXTRA PAVEMENT "P" INCIDENTAL CONSTRUCTION

Sheet No	Reference No	E-1 Excava- tion	E-8 Side- walk Removal	E-8 Stone Curb Removed & Stored	I-13 4" Side- walk	I-20 5" Insul- ation Course	B-35 Base Course	T-30 Prime Coat	B-35 Leveling Course	T-35 Surface Course	I-12 Type 6 Conc. Curb	Ref. No	Station	Side	I-8 Adjust Manhole Tops to Grade Each	I-8 Adjust Monument Boxes to Grade Each	S-122 Catch Basin Abandon- ed Each
7	1-P 15-P							236.9	158.6	236.9		1-1	12+17	Lt.	1		
8	1-P 11-P							316.2	216.0	316.2		2-1	15+18	Lt.			1
9	1-P 10-P							250.7	175.4	250.7		3-1	25+44	Lt.	1		
10	1-P 10-P							221.9	155.9	221.9		4-1	25+02	Lt.		1	
11	1-P 9-P							438.2	302.4	438.2		5-1	39+67	Lt.	1		
12	1-P 11-P	6	60	72	26	21	21	441.6	305.6	441.6	72	6-1	41+33	Rt.	1		
13	1-P 15-P							171.5	121.0	171.5		7-1	41+33	Lt.	1		
14	1-P 11-P							351.6	249.9	351.6		8-1	41+42	Lt.	1		
15	1-P 4-P							156.1	112.7	156.1		9-1	44+85	Lt.	1		
16	1-P							96.2	72.8	96.2		10-1	44+93	Lt.	1		
												11-1	48+79	Lt.	1		
												12-1	48+81.5	Lt.	1		
												13-1	52+30	Lt.	1		
												14-1	52+32	Lt.	1		
												15-1	58+52	Rt.	1		
												16-1	58+52.7	Rt.		1	
												17-1	61+95	Lt.	1		
												18-1	68+90	Lt.	1		
												19-1	76+06	Lt.	1		
Totals		6	60	72	26	21	21	2680.9	1870.3	2680.9	72	Totals			16	2	1