

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

S - US - 334 (6)

| | | |
|-------------------|-------|---------|
| FED. RD. DIVISION | STATE | PROJECT |
| 2 | OHIO | |

LOGAN COUNTY
LOG-47DA-(0.56)
LOG-47-(14.16-14.57)

APPROVED FOR THE CITY OF BELLEFONTAINE

DATE: _____ BY: _____ TITLE: _____

LOG-47DA-(0.56)
LOG-47-(14.16-14.57)

CITY OF BELLEFONTAINE
LAKE TOWNSHIP
LOGAN COUNTY

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF HIGHWAYS, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

THE RIGHT OF WAY NECESSARY FOR THIS IMPROVEMENT WILL BE PROVIDED BY THE STATE OF OHIO.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND A DETOUR WILL BE PROVIDED AS SHOWN ON SHEET N° 1.
LIMITED ACCESS: THIS IMPROVEMENTS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH THE PROVISIONS OF SEC. 5511.02 OF THE REVISED CODE OF OHIO. LIMITED ACCESS FROM STA. _____ TO STA. _____ PROP. §R. 47.

CONVENTIONAL SIGNS

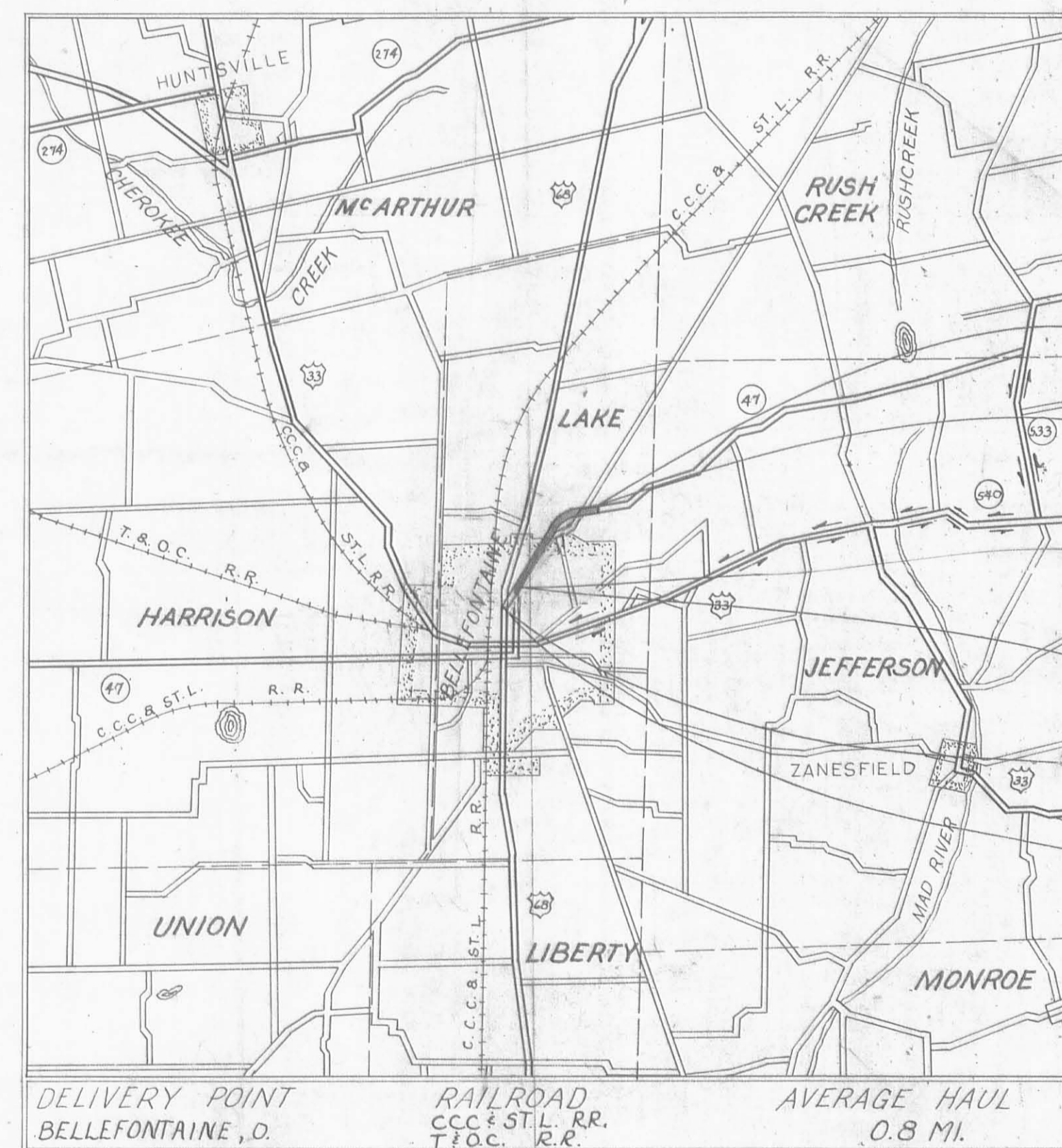
| | |
|---------------------------------|-------|
| COUNTY LINE | _____ |
| TOWNSHIP LINE | _____ |
| SECTION LINE | _____ |
| CORPORATION LINE | _____ |
| PROPERTY LINE | _____ |
| FENCE LINE | _____ |
| CENTER LINE | _____ |
| POLE LINE | _____ |
| RAILROAD | _____ |
| HEDGE | _____ |
| DRAIN PIPE (NEW) | _____ |
| DRAIN PIPE (OLD) | _____ |
| GUARD RAIL (NEW) | _____ |
| GUARD RAIL (OLD) | _____ |
| TREES & STUMPS TO BE REMOVED | _____ |
| RIW LINE (PROPOSED) | _____ |
| TEMPORARY RIGHT-OF-WAY | _____ |
| LIMITED ACCESS AND RIGHT-OF-WAY | _____ |
| LIMITED ACCESS RIGHT-OF-WAY | _____ |

LENGTH OF PROJECT LOG-47DA-(0.56) MUNICIPAL
BEGIN PROJECT STA. 738+98.44
END PROJECT STA. 748+20.58
NET LENGTH OF PROJECT LOG-47DA-(0.56) MUNICIPAL = 922.14 LIN. FT. or 0.174 MI.
BEGIN WORK STA. 738+38.18
END WORK STA. 748+20.58
NET LENGTH OF WORK LOG-47DA-(0.56) MUNICIPAL = 982.40 LIN. FT. or 0.186 MI.
LENGTH OF PROJECT LOG-47-(14.16-14.57) MUNICIPAL
BEGIN PROJECT STA. 748+20.58
CORPORATION LINE STA. 769+25.59
NET LENGTH OF PROJECT LOG-47-(14.16-14.57) MUNICIPAL = 2105.01 LIN. FT. or 0.398 MI.
NET LENGTH OF WORK LOG-47-(14.16-14.57) MUNICIPAL = 2105.01 LIN. FT. or 0.398 MI.
LENGTH OF PROJECT LOG-47-(14.16-14.57) RURAL
CORPORATION LINE STA. 769+25.59
END PROJECT STA. 813+41.84
END WORK STA. 813+96.84
ADD FOR DOWELL ROAD APPROACH = 826.12 LIN. FT.
ADD FOR ALLISON ROAD APPROACH = 516.52 LIN. FT.
ADD FOR RD. APPROACH RT. STA. 786+22.70 = 460.70 LIN. FT.
ADD FOR RD. APPROACH RT. STA. 802+75.00 = 313.82 LIN. FT.
ADD FOR CO. RD. #9 = 394.85 LIN. FT.
NET LENGTH OF PROJECT LOG-47-(14.16-14.57) RURAL = 4416.25 LIN. FT. or 0.836 MI.
NET LENGTH OF WORK LOG-47-(14.16-14.57) RURAL = 6983.26 LIN. FT. or 1.322 MI.

TOTAL NET LENGTH OF PROJECT = 7443.40 LIN. FT. or 1.409 MI.
TOTAL NET LENGTH OF WORK = 10070.67 LIN. FT. or 1.907 MI.

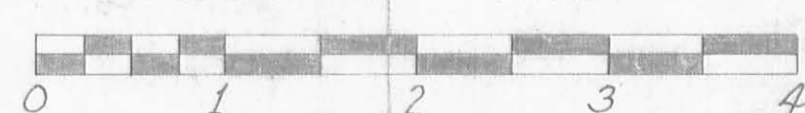
INDEX OF SHEETS

| | |
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LOCATION PLAN

SCALE OF MILES



PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS
DETOUR

SCALES

| | |
|-----------------------|-------------------|
| PLAN | 0 20 40 60 80 100 |
| PROFILE HORIZONTAL | 0 2 4 6 8 10 |
| PROFILE VERTICAL | 0 10 20 30 40 |
| CROSS SECTIONS | 0 1 2 3 4 |
| PLAN & PROFILE HORIZ. | 0 5 10 15 20 |
| PROFILE VERTICAL | |
| CROSS SECTIONS | |

| | |
|---------------------|---|
| APPROVED DATE _____ | DIVISION DEPUTY DIRECTOR |
| APPROVED DATE _____ | ENGINEER OF BRIDGES |
| APPROVED DATE _____ | ENGINEER OF LOCATION AND DESIGN |
| APPROVED DATE _____ | DEPUTY DIRECTOR OF DESIGN AND CONSTRUCTION |
| APPROVED DATE _____ | DEPUTY DIRECTOR OF RIGHT OF WAY |
| APPROVED DATE _____ | DEPUTY DIRECTOR OF PLANNING AND PROGRAMMING |
| APPROVED DATE _____ | FIRST ASSISTANT DIRECTOR |
| APPROVED DATE _____ | DIRECTOR OF HIGHWAYS |

| STANDARD | DRAWINGS |
|---------------------|----------|
| L-1 | 4-1-50 |
| HW-E | 2-1-63 |
| FACT-1 | 3-8-63 |
| FACT-2 | 3-8-63 |
| DR-1 | 1-3-55 |
| RI-1 | 7-15-58 |
| T-35 | 1-2-56 |
| I-21-23 | 8-1-56 |
| L-3 | 4-1-50 |
| L-3-A | 4-1-50 |
| F-8 MH N°1 | 2-1-63 |
| I-1 | 11-15-60 |
| F-8 C.B. F-2 R.C.B. | 2-1-63 |
| F-8 C.B. N°3 | 2-1-63 |
| F-8 C.B. N°3-A | 2-1-63 |
| F-8 I. N°1 | 2-1-63 |
| I-12 | 2-1-63 |
| G-7.07 | 6-1-56 |

PRELIMINARY ISSUED

MAR 12 1964

OHIO DEPT. HIGHWAYS
DIV. 7, SIDNEY, OHIO

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____

DIVISION ENGINEER DATE

| SUPPLEMENTAL SPECIFICATIONS | |
|-----------------------------|------|
| N° | Date |
| | |
| | |
| | |


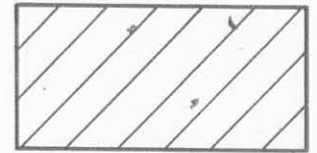
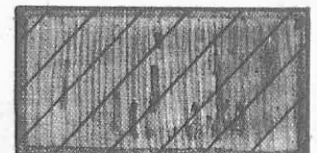
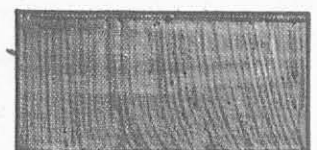

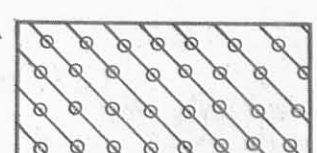


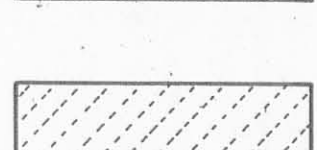
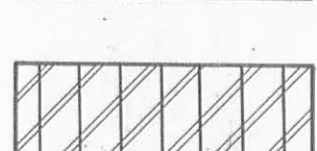
| | |
|-----------------|--|
| FILE NUMBER | LOGAN COUNTY LOG-47DA-(0.56); LOG-47-(14.16-14.57) |
| DATE OF LETTING | |
| CONTRACT N° | |

L-47

| | | | |
|-------------------|-------|---------|--|
| FED. RD. DIVISION | STATE | PROJECT | |
| 2 | OHIO | | |

LOGAN COUNTY
LOG-47DA-(10.56)
LOG-47-(14.16-14.57)

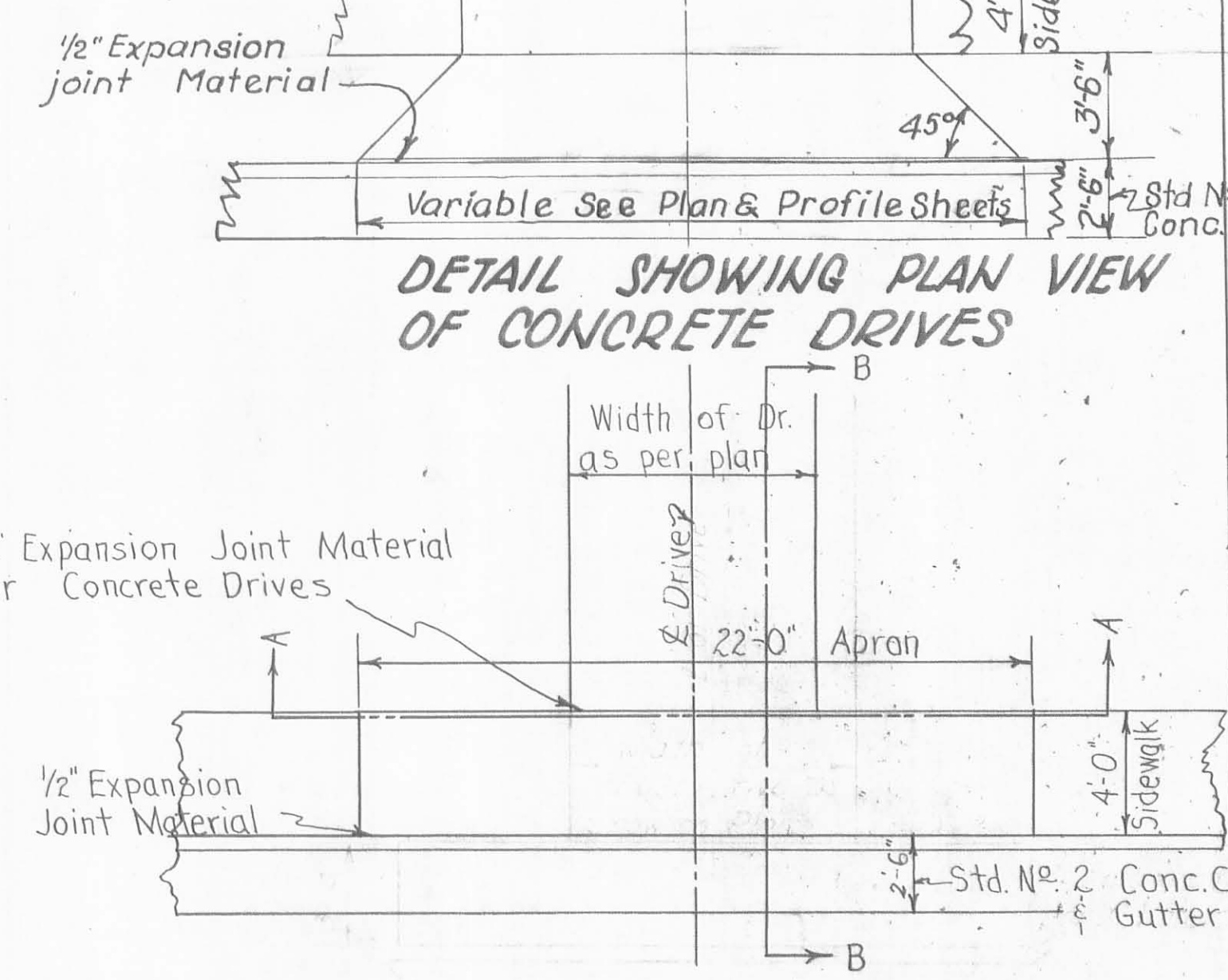
° **SYMBOLS** ° Indicating prop. Pavement Type.

-  Feather T-35 Asphaltic Concrete Surface and B-35 Asphaltic Concrete Leveling Course to 0" on Existing Bituminous Surface.
-  2" of T-35 Asphaltic Concrete Surface Course, Type "C" on T-30 Bituminous prime Coat @ 0.40 gal/sp.yd. on 5" B-19 Aggregate Base Course. T-35 to be placed in 2-1" Courses.
-  8" of 1-18 Stabilized Crushed Aggregate Shoulders and Approaches.
-  6" of 1-18 Stabilized Crushed Aggregate Shoulders and Approaches.
-  1" of T-35 Asphaltic Concrete Surface Course on 1 1/2" of B-35 Asphaltic Concrete Leveling Course on 6" B-21 Waterproofed Aggregate Base Course, placed 2-3 Courses, on 6" Subbase, Grading "C" or "D"
-  1" of T-35 Asphaltic Concrete Surface Course on 1 1/2" of B-35 Asphaltic Concrete Leveling Course on 4" B-21 Waterproofed Aggregate Base Course, Placed in 2-2" Courses on 6" Subbase, Grading "C" or "D"
-  E-8 Removal of Existing Pavement.
-  I-13 ~ 4" Concrete Sidewalk
-  1" T-35 Asphaltic Concrete on 1 1/2" B-35 Asphaltic Concrete Leveling Courses on T-30 Tack Coat on Exist. Bituminous Surface.
-  T-70 ~ 7" Portland Cement Concrete Pavement

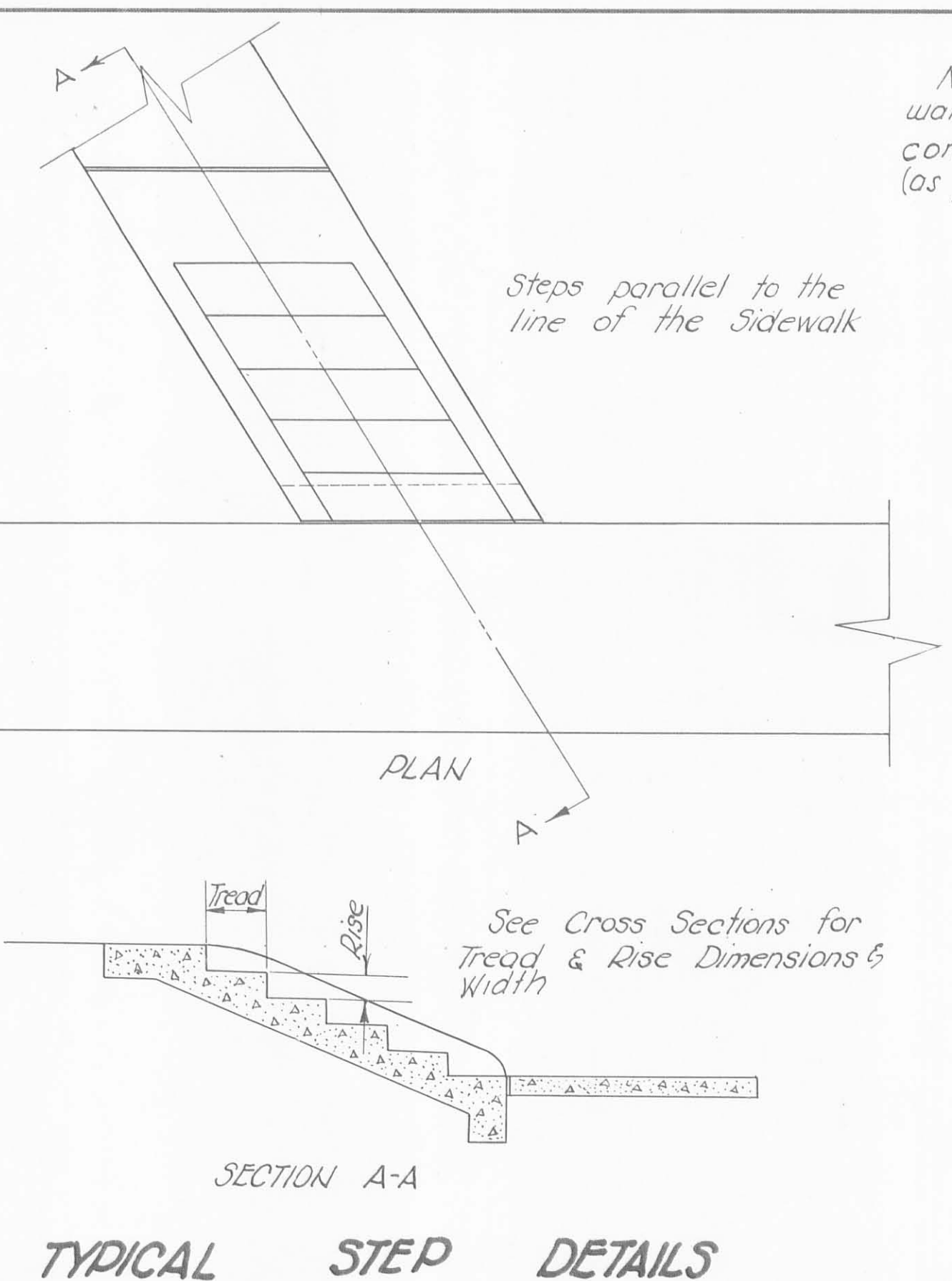
Note: The 3" φ Galvanized downspouting thru walk and extension thru curb and additional concrete to be included in I-13, Sidewalk (as per plan)

SECTION THRU UNDERWALK DRAIN

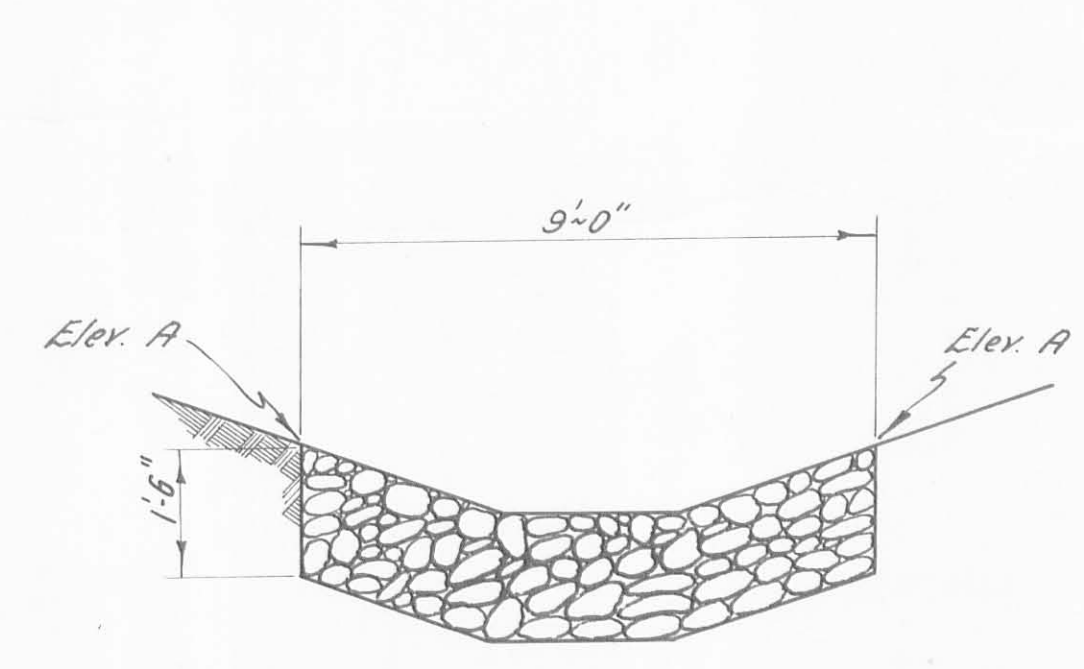
UNDERWALK DRAIN LOCATIONS
 STATION SIDE STATION SIDE



DETAIL SHOWING PLAN VIEW OF CONCRETE DRIVES

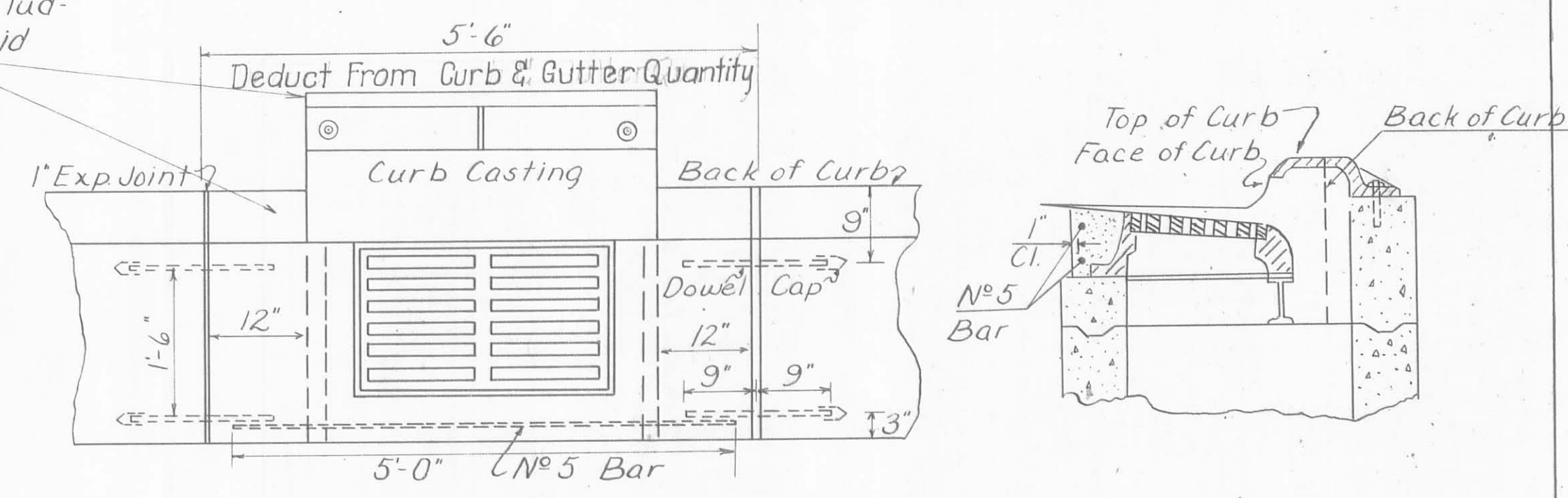


TYPICAL STEP DETAILS



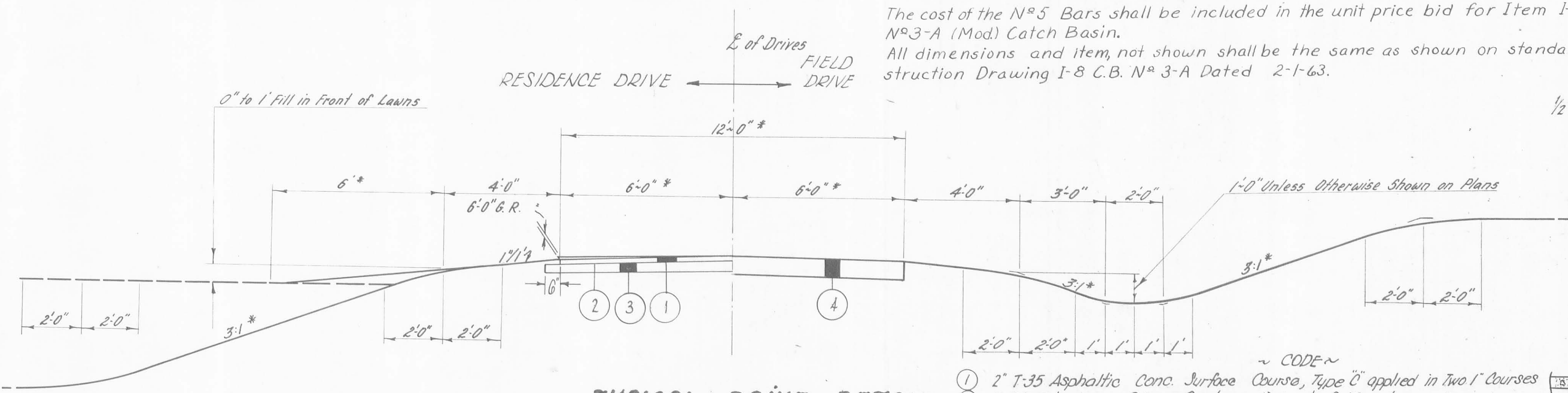
I-10 DUMPED ROCK CHANNEL PROTECTION

Cost of Curb is included in unit price bid of Catch Basin.



STANDARD N° 3-A CATCH BASIN (MODIFIED)

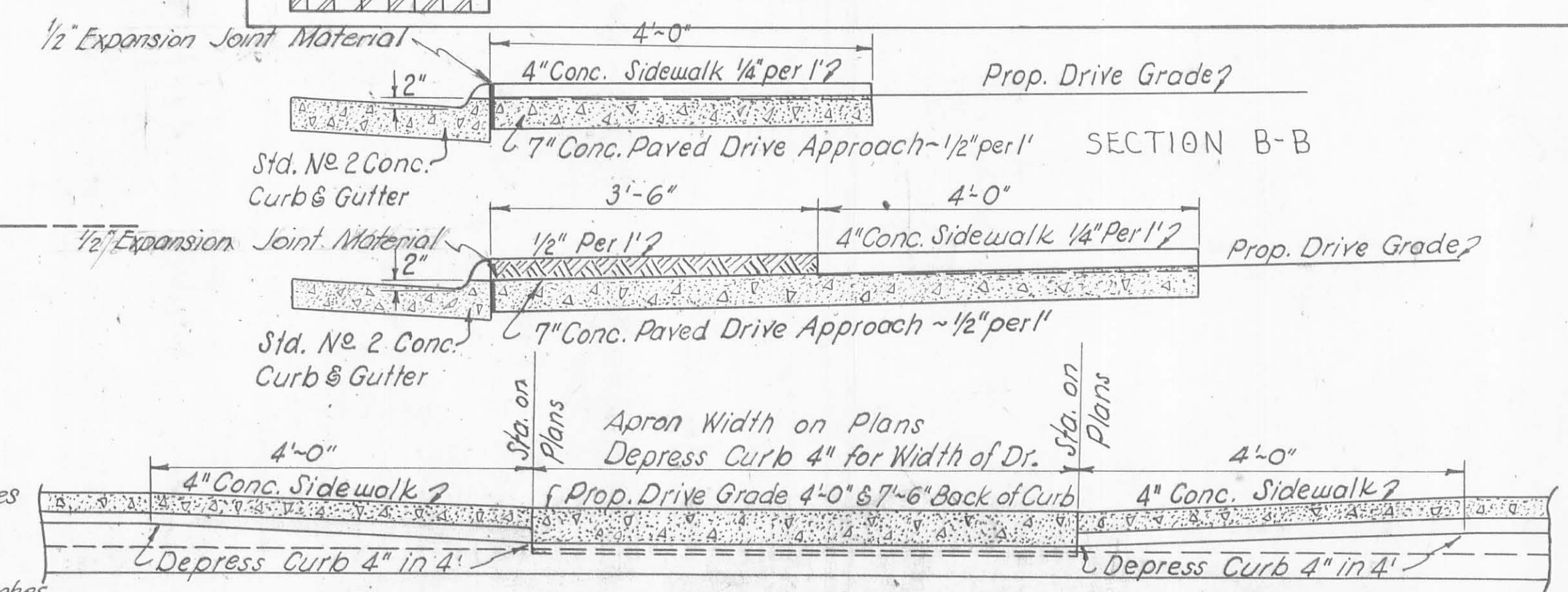
The cost of the N° 5 Bars shall be included in the unit price bid for Item 1-8 Std. N° 3-A (Mod) Catch Basin. All dimensions and items, not shown shall be the same as shown on standard Construction Drawing I-8 C.B. N° 3-A Dated 2-1-63.



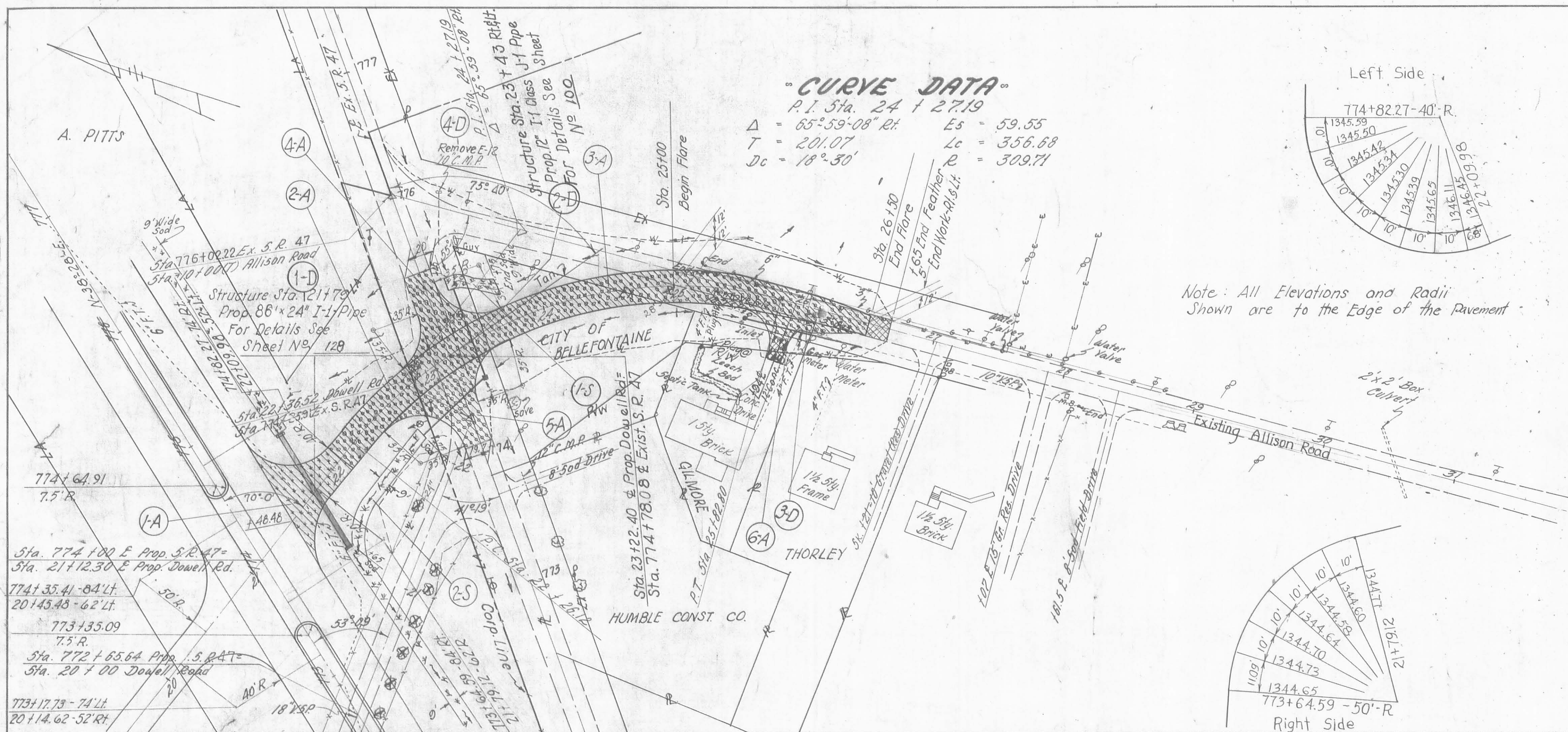
TYPICAL DRIVE DETAIL "RURAL"

- ① 2" T-35 Asphaltic Conc. Surface Course, Type "C" applied in Two 1" Courses
- ② T-30 Bituminous Prime Coat applied at 0.40 gal. per sq. yd.
- ③ 5" B-19 Aggregate Base Course
- ④ 6" or 8" 1-18 Stabilized Crushed Aggregate Shoulders and Approaches.

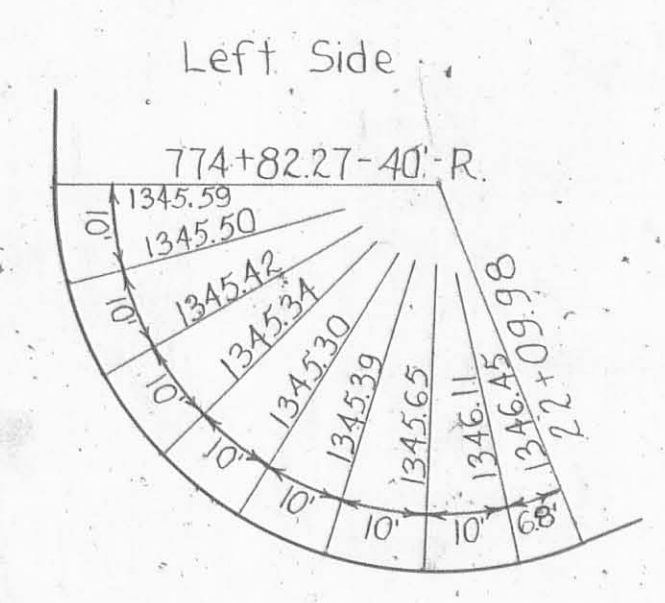
* Unless Otherwise Shown on Plans



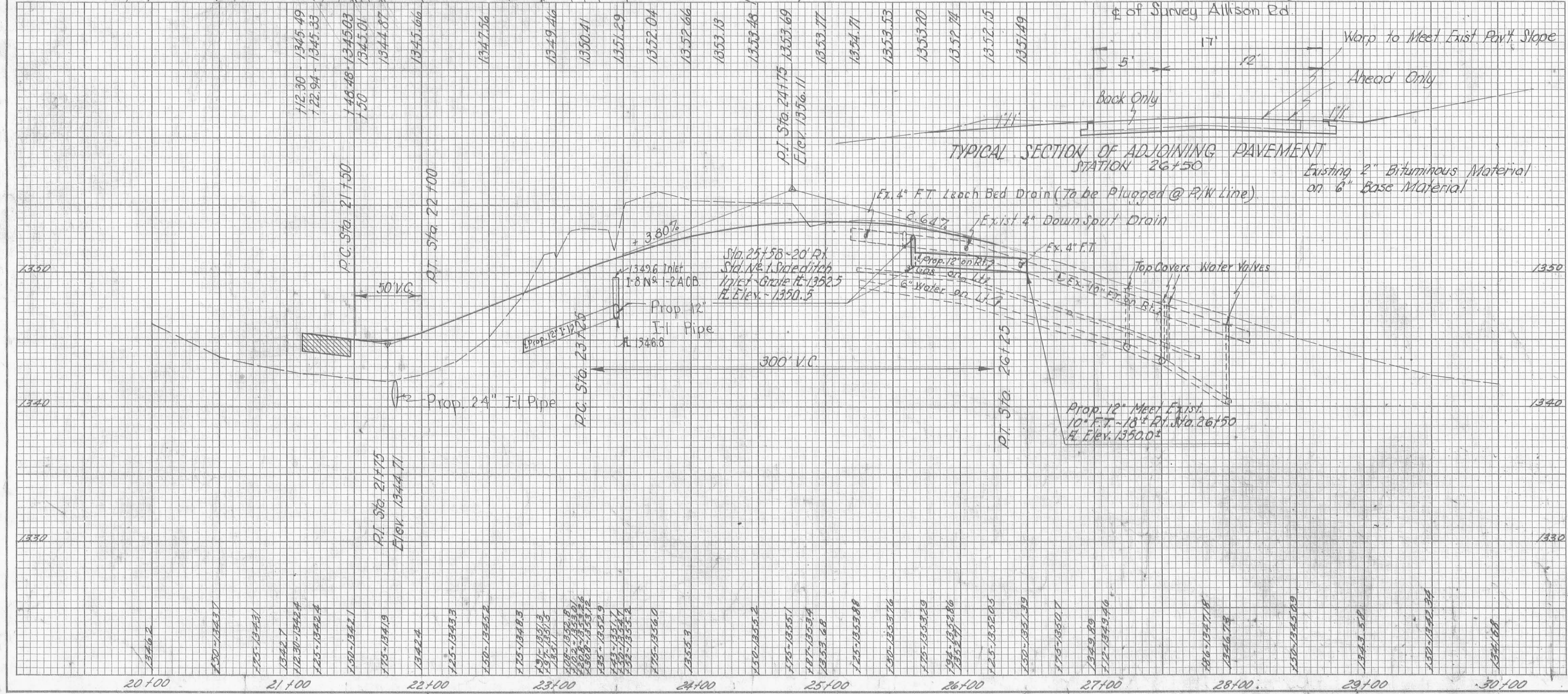
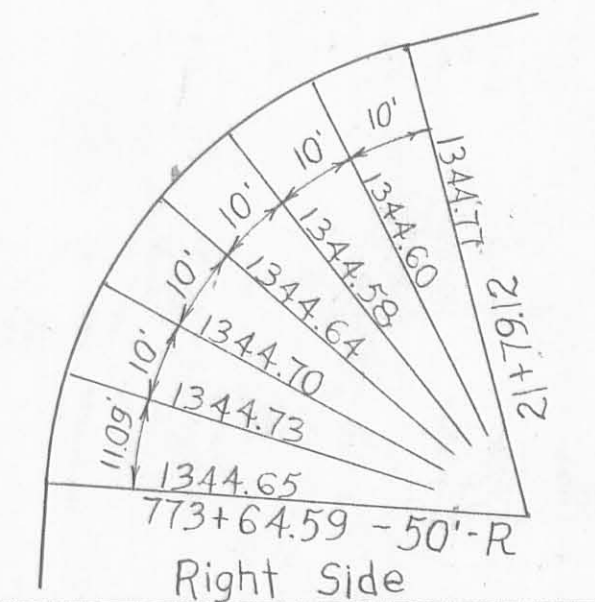
DETAIL SHOWING SIDEWALK APPROACHES TO DRIVES



"CURVE DATA"
 P.I. Sta. 24 + 27.19
 $\Delta = 65^{\circ}59'08''$ Rt. $E_s = 59.55$
 $T = 201.07$ $L_c = 356.68$
 $D_c = 18^{\circ}30'$ $R = 309.71$



Note: All Elevations and Radii Shown are to the Edge of the Pavement



TYPICAL SECTION OF ADJOINING PAVEMENT
 STATION 26+50
 Existing 2" Bituminous Material on 6" Base Material
 4" FT Leach Bed Drain (To be Plugged @ P/W Line)
 4" EXIST DOWNSPUT DRAIN
 6" WATER ON LI
 6" EX. 10" EX. 5" S.I.A.
 Top Covers Water Valves
 Prop. 12" Meet Exist 10" C.T. - 18" R.I. Sta. 26+50 H. Elev. 1390.04
 Prop. 12" I-1 Pipe
 R.C. 5/6 23+25
 Prop. 24" I-1 Pipe
 R.C. 5/6 21+75
 50' V.C.
 P.C. 5/6 21+50
 A.T. 5/6 22+00
 3.80%
 2.64%
 5' Ahead Only
 12' Back Only
 Warp to Meet Exist Pavt. Slope

| REF. NO. | STATION TO STATION | SIDE | T-35 | B-35 | B-21 | I-22 | I-21 | I-2 | I-1 | E-8 | E-12 | E-1 | SEE SHEET NO. |
|-------------------------------|---------------------|------|------|------|-------|-------|------|------|-----|-----|------|-----|---------------|
| 1-A | 21+48.48 - 22+09.08 | L/S | 7.3 | 10.9 | 44.2 | 46.7 | | | | | | | |
| 2-A | 22+09.08 - 22+80.0 | L/S | 6.5 | 9.8 | 26.2 | 43.7 | | | | | | | |
| 1-D | 21+70 | L/S | | | | | 86 | 0.82 | | | | | |
| 2-S | 21+65 - 22+75 | R/S | | | | | | | | | | | |
| | 21+75 - 22+50 | R/S | | | | | | | | | | | |
| TOTALS TO CALCULATIONS | | | 13.8 | 20.7 | 71.1 | 90.4 | 86 | 0.82 | 30 | | | | |
| TOTALS TO SUMMARY | | | 13.8 | 20.7 | 71.1 | 90.4 | 86 | 0.82 | 30 | | | | |
| 3-A | 22+80 - 26+65 | L/S | 25.0 | 38.5 | 103.8 | 170.8 | | | | | | | |
| 4-A | 23+22.4 - | L/S | 3.0 | 7.5 | 20.1 | 62.2 | | | | | | | |
| 5-A | 23+22.4 | R/S | 3.6 | 8.3 | 22.8 | 36.6 | | | | | | | |
| 6-A | 23+24 | R/S | 2.5 | 3.8 | 10.4 | 17.0 | | | | | | | |
| 2-D | 23+43 | L/S | | | | | | | | | | | |
| 3-D | 23+20 | R/S | | | | | | | | | | | |
| 4-D | 23+56 - 23+95 | R/S | | | | | | | | | | | |
| 1-S | 23+45 - 23+75 | L/S | | | | | | | | | | | |
| TOTALS TO CALCULATIONS | | | 39.0 | 58.1 | 157.1 | 286.6 | | | | | | | |
| TOTALS TO SUMMARY | | | 39.0 | 58.1 | 157.1 | 286.6 | | | | | | | |

STA. 774+00 PROP. S.R. 47 RT. PLAN AND PROFILE STA. 20+00 TO STA. 32+00 ALLISON ROAD APPROACH

CURVE DATA
 Prop. S.R. 47
 P.I. Sta. 795+72.79
 $\Delta = 45^\circ - 25' - 08'' - R.T.$
 $D_c = 3^\circ - 00''$ $X_c = 299.81'$
 $L_s = 300'$ $Y_c = 7.85'$
 $T_s = 950.09'$ $A_c = 36^\circ - 25' - 08''$
 $E_s = 162.63'$ $L_c = 1213.96'$
 $O_s = 04^\circ - 30'$ $R = 1909.86'$

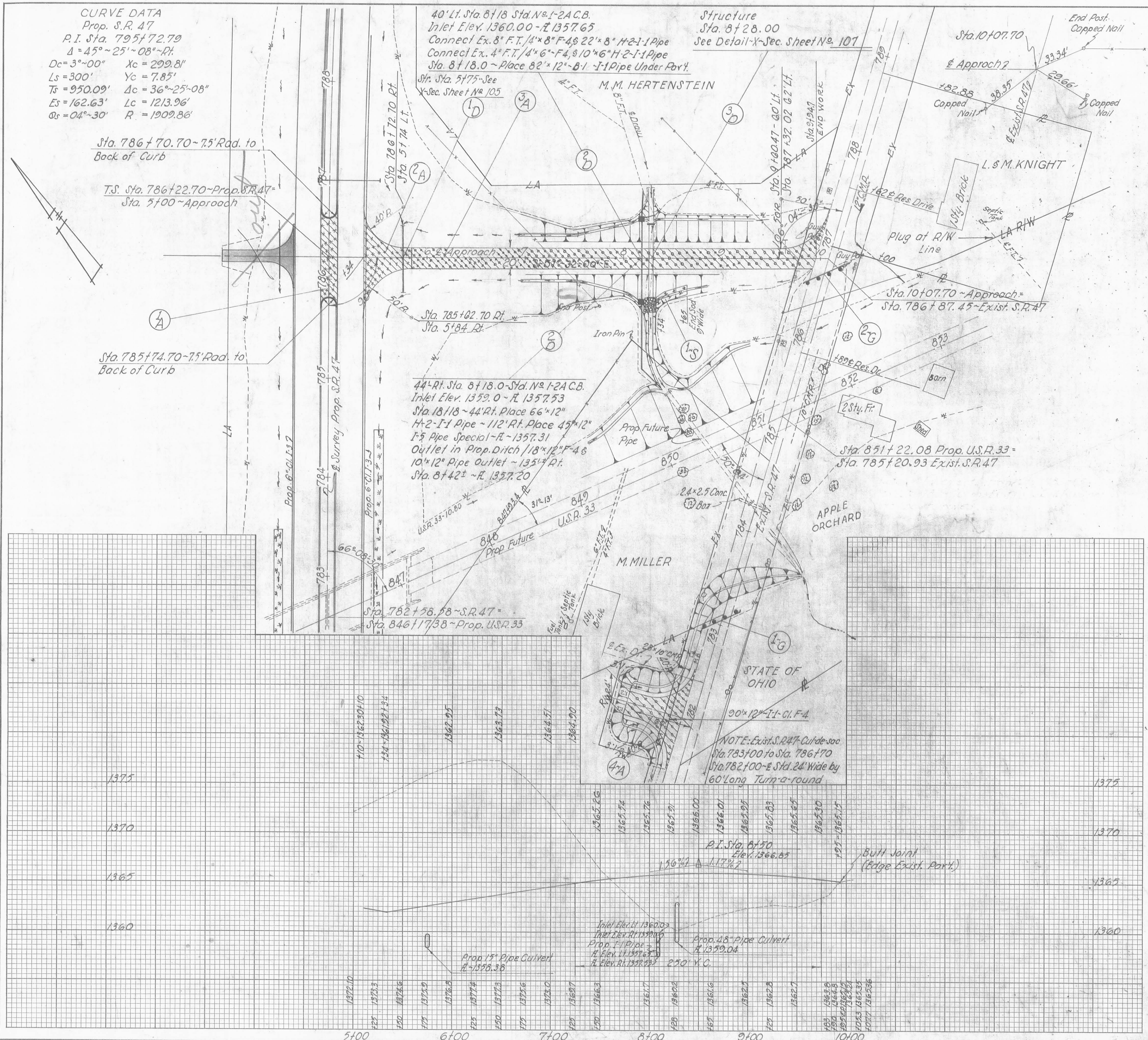
Sta. 786+70.70 ~ 75' Rad. to Back of Curb
 T.S. Sta. 786+22.70 ~ Prop. S.R. 47
 Sta. 5+00 ~ Approach
 Sta. 785+74.70 ~ 75' Rad. to Back of Curb

40' Lt. Sta. 8+18 Std. No. 1-2A.C.B.
 Inlet Elev. 1360.00 ~ R 1357.65
 Connect Ex. 8" F.T. 4" x 8" F-4 S 22" x 8" H-2-1 Pipe
 Connect Ex. 4" F.T. 4" x 6" F-4 S 10" x 6" H-2-1 Pipe
 Sta. 8+18.0 ~ Place 82" x 12" B-1 -1-1 Pipe Under Part.

Structure
 Sta. 8+28.00
 See Detail-X-sec. Sheet No. 107

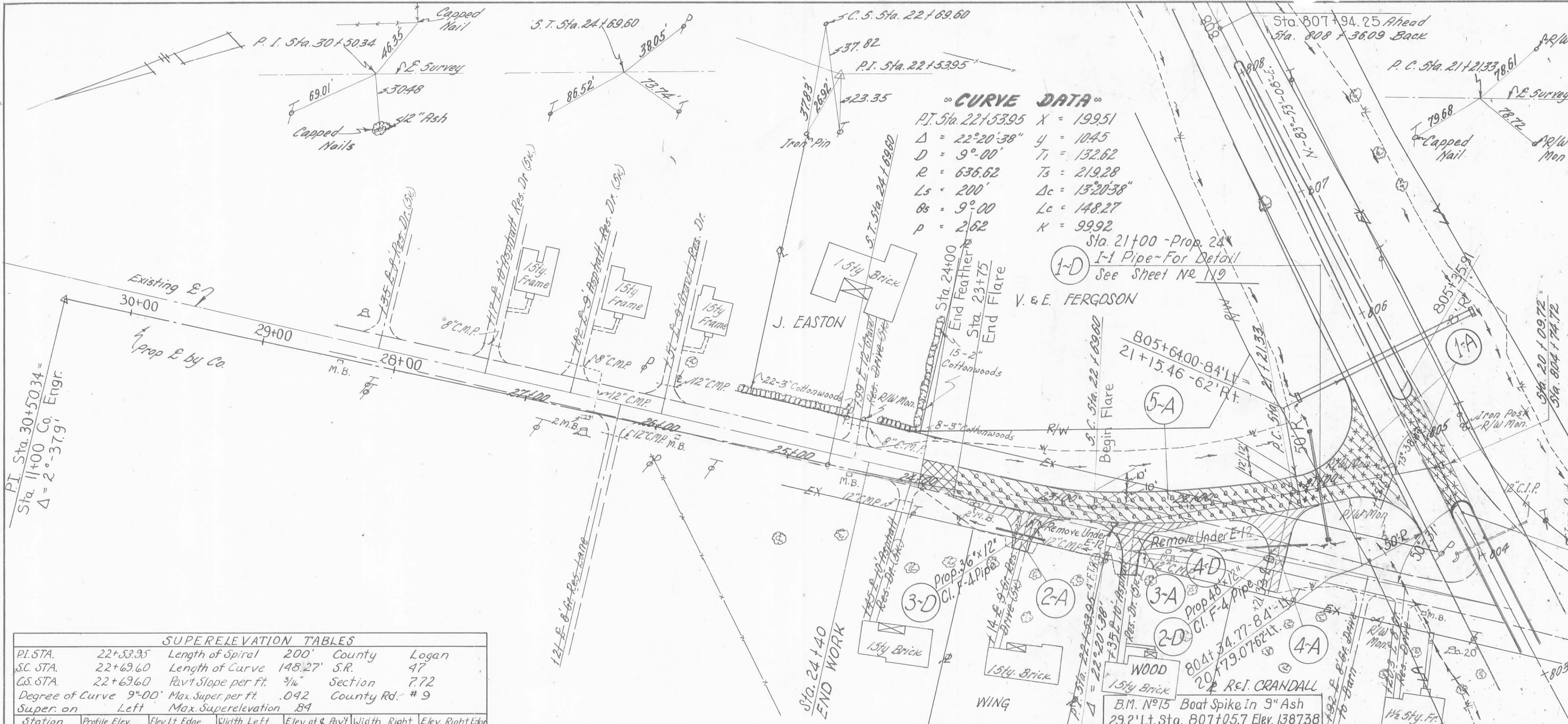
LOGAN COUNTY
 LOG-47DA-(10.56)
 LOG-47-(14.16-14.57)

| | | |
|-------------------|-------|---------|
| FED. RD. DIVISION | STATE | PROJECT |
| 2 | OHIO | |



| REF. NO. | STATION TO STATION | SIDE | ESTIMATED QUANTITIES - LOG-47-(14.16-14.57) - Rural |
|-------------------------------|------------------------------|------|---|
| 1-A | 785+74.70 ~ 786+70.70 (150') | LI | 12" Pipe 90 |
| 2-A | 786+70.70 ~ 786+70.70 (0') | LI | 12" Pipe 0 |
| 3-A | 786+70.70 ~ 786+70.70 (0') | LI | 12" Pipe 0 |
| 4-A | 786+70.70 (EXIST. S.R. 47) | LI | 12" Pipe 0 |
| 1-D | 5+00 ~ 5+00 (0') | LI | 12" Pipe 0 |
| 2-D | 5+00 ~ 5+00 (0') | LI | 12" Pipe 0 |
| 3-D | 5+00 ~ 5+00 (0') | LI | 12" Pipe 0 |
| 1-S | 8+18 ~ 8+18 (0') | PI | 12" Pipe 0 |
| 1-G | 783+00 (EXIST. S.R. 47) | E | 12" Pipe 0 |
| 2-G | 786+70 (EXIST. S.R. 47) | E | 12" Pipe 0 |
| TOTALS TO CALCULATIONS | | | 12" Pipe 90 |
| TOTALS TO SUMMARY | | | 12" Pipe 90 |

ROAD APPROACH RT. STA. 786+22.70 ~ STA. 5+00 TO STA. 10+07.70

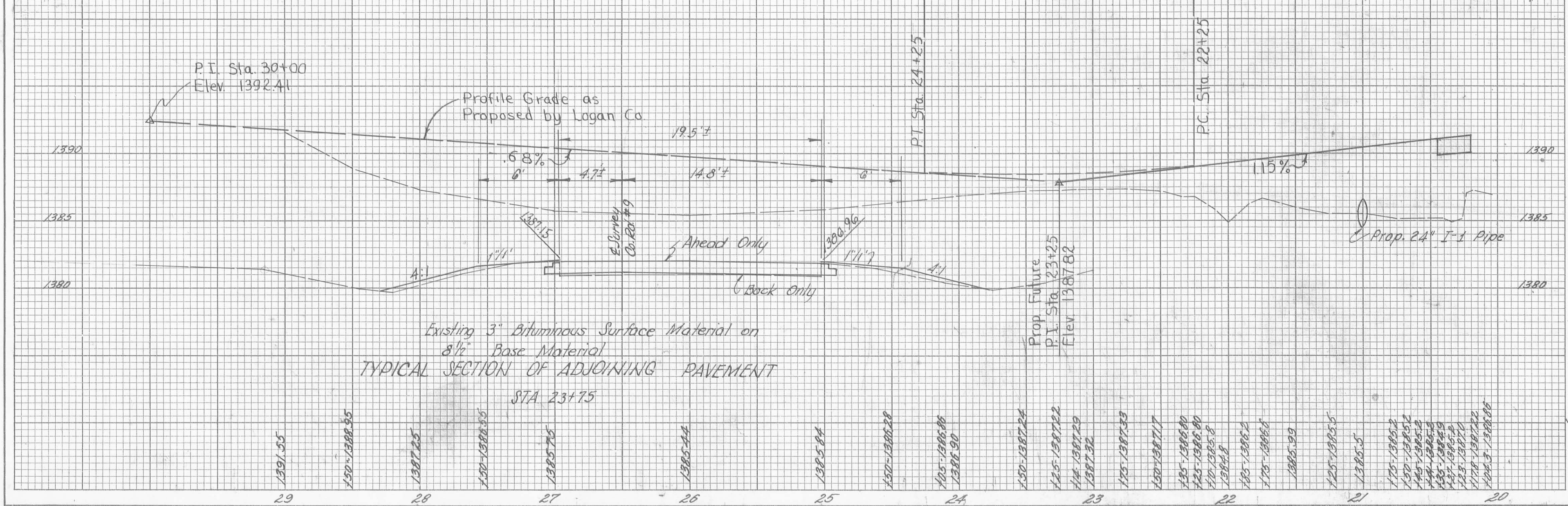


"CURVE DATA"
 P.I. Sta. 22+53.95 X = 199.51
 Δ = 22°20'38" Y = 104.5
 D = 9°00' T_s = 132.62
 R = 636.62 T_s = 219.28
 L_s = 200' L_c = 132°20'38"
 Δ_s = 9°00' L_c = 148.27
 P = 262 X = 99.92

SUPERELEVATION TABLES

P.I. STA. 22+53.95 Length of Spiral 200' County Logan
 S.C. STA. 22+63.60 Length of Curve 148.27 S.R. 47
 C.S. STA. 22+63.60 Rev't Slope per ft. 3/16" Section 7.72
 Degree of Curve 9°00' Max. Super. per ft. .042 County Rd. # 9
 Super. on Left Max. Super. 8.9

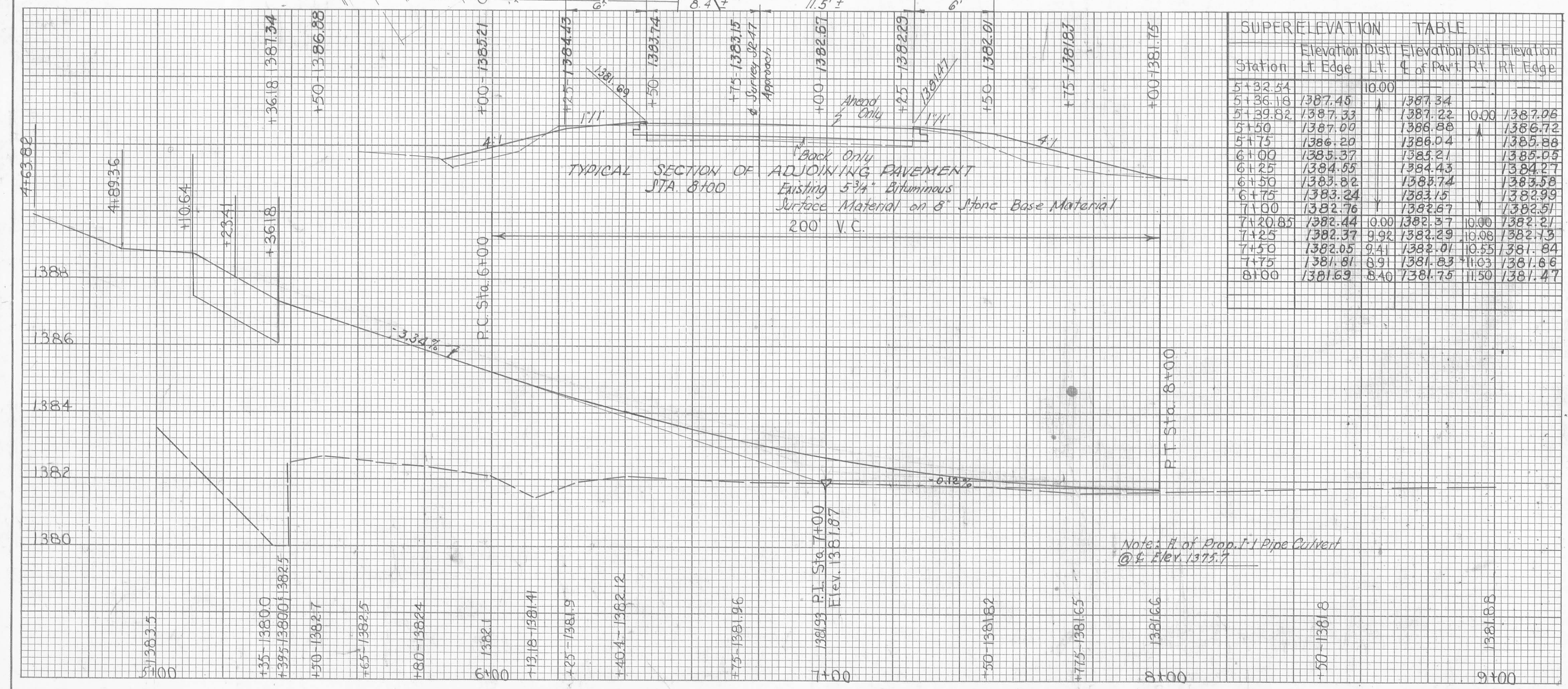
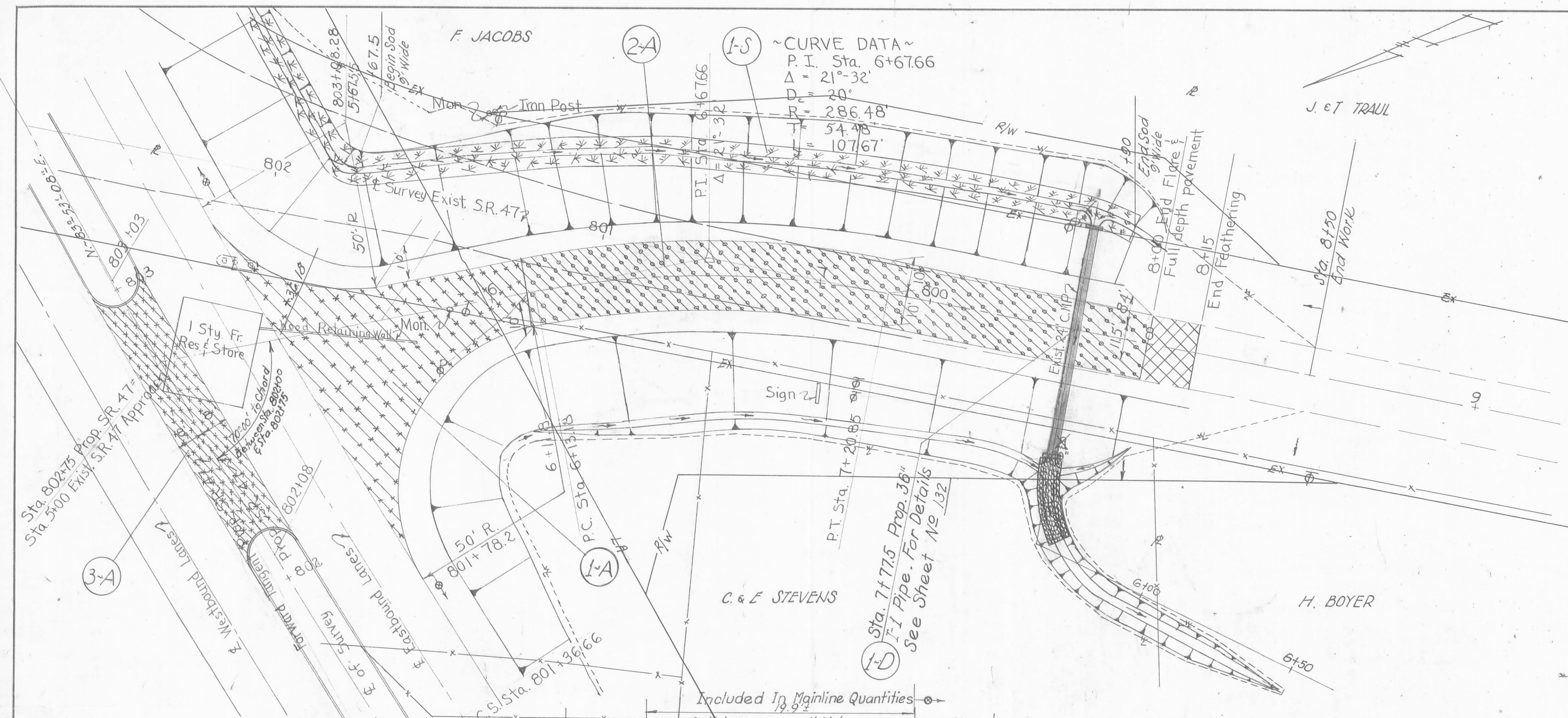
| Station | Profile Elev. | Elev. Lt. Edge | Width Left | Elev. at C. Pav't | Width Right | Elev. Right Edge |
|---------|---------------|----------------|------------|-------------------|-------------|------------------|
| 20+75 | 1390.70 | 1390.89 | 12 | | | |
| 21+00 | 1390.41 | 1390.60 | 12 | | | |
| +25 | 1390.12 | 1390.50 | 11.68 | 1390.12 | 11.88 | 1389.93 |
| +50 | 1389.83 | 1390.7 | 11.56 | 1389.86 | 11.56 | 1389.63 |
| +75 | 1389.55 | 1389.93 | 11.24 | 1389.63 | 11.24 | 1389.55 |
| 22+00 | 1389.26 | 1389.81 | 10.91 | 1389.44 | 10.91 | 1389.07 |
| +25 | 1388.97 | 1389.63 | 10.59 | 1389.21 | 10.59 | 1388.78 |
| +50 | 1388.68 | 1389.37 | 10.26 | 1388.95 | 10.26 | 1388.51 |
| +75 | 1388.40 | 1388.95 | 9.73 | 1388.60 | 10.25 | 1388.22 |
| 23+00 | 1388.11 | 1388.47 | 8.47 | 1388.23 | 11.39 | 1387.71 |
| +25 | 1387.82 | 1387.97 | 7.21 | 1387.83 | 12.53 | 1387.62 |
| +50 | 1387.53 | 1387.53 | 5.96 | 1387.53 | 13.66 | 1387.31 |
| +75 | 1387.24 | 1387.15 | 4.70 | 1387.24 | 14.80 | 1386.96 |



ESTIMATED QUANTITIES

| REF. NO. | STATION TO STATION | SIDE | T-35 | B-35 | F-30 | B-19 | I-22 | I-1 | I-1 | I-1 | I-2 | E-1 | E-2 | SEE SHEET NO. |
|-------------------------------|-----------------------|--------|------|------|------|-------|------|-----|-----|-----|-----|-----|-----|---------------|
| 1-A | 20+101.38 - 21+115.46 | L/S.R. | 13.5 | 20.2 | 43.0 | 80.4 | 80.4 | 76 | 48 | 36 | 486 | 61 | 18 | 80.7 |
| 2-A | 23+14 | L | 6.0 | | 39.4 | 16.2 | | | | | | | | 70.3 |
| 3-A | 22+135 | L | 5.5 | | 47.7 | 14.7 | | | | | | | | |
| 4-A | 21+21.33 | L | 6.6 | 26.8 | | | | | | | | | | |
| 5-A | 21+115.46 - 24+100 | L/S.R. | 18.5 | | | 111.5 | | | | | | | | |
| 1-D | 21+00 | L/S.R. | | | | | | | | | | | | |
| 2-D | 21+21.33 | L | | | | | | | | | | | | |
| 3-D | 23+14 | L | | | | | | | | | | | | |
| 4-D | 22+135 | L | | | | | | | | | | | | |
| TOTALS TO CALCULATIONS | | | | | | | | | | | | | | 131.0 |
| TOTALS TO SUMMARY | | | | | | | | | | | | | | 40 |

| | | |
|-------------------|-------|---------|
| FED. RD. DIVISION | STATE | PROJECT |
| 2 | OHIO | |



STA. 802+75 PROP. SR. 47 RT.

PLAN & PROFILE PROP. & EXIST. S.R. 47 INTERSECTION

ESTIMATED QUANTITIES - LOG-47-(14.16-14.57) - Rural

| REF. NO. | STATION TO STATION | SIDE | T-35 Asphalt/Asphalitic Concrete | B-35 Asphaltic Concrete | B-21 Asphaltic Concrete | D-19 Aggregate Base | T-30 Prime Coat | I-22 Subbase | I-10 Sod | I-1 36" Cl. A-1 Sec. M. 68(b) or M. 68(b) | I-2 Masonry | I-10 Dumped Rock | E-3 Channel Excavation | E-1 Compacted Subgrade | TOTALS |
|---------------|--------------------|------|--|-------------------------------|-------------------------------|---------------------------|-----------------------|-----------------|-------------|--|----------------|------------------------|------------------------------|------------------------------|--------|
| NO. | | | Cu. Yds. | Cu. Yds. | Cu. Yds. | Cu. Yds. | Sq. Yds. | Sq. Yds. | Sq. Yds. | Lin. Ft. | Cu. Yd. | Cu. Yd. | Cu. Yd. | Sq. Yd. | |
| 1-A | 5+36.18 - 6+11.5 | 1.0A | 8.9 | 13.5 | 54.9 | 60.9 | 167.2 | 56.3 | | | | | | 330 | |
| 2-A | 6+11.5 - 8+75 | 1.0B | 12.3 | 18.3 | 23.4 | | 51.1 | | | | | | | 270 | |
| 3-A | 4+491.2 - 5+108.5 | 1.0B | 4.2 | 6.4 | 23.4 | | 23.4 | | | | | | | 26 | |
| 1-D | 7+777.2 | 1.0B | | | | | | | | 62 | 1.18 | 13.9 | 17 | | |
| 1-S | 5+167.5 - 7+100 | 1.1 | | | | | | 238 | | | | | | | |
| TOTALS | | | 25.6 | 38.2 | 78.3 | 60.9 | 167.2 | 130.8 | 238 | 62 | 1.18 | 13.9 | 17 | 266 | |

TOTALS TO CALCULATIONS
TO SUMMARY