

#1002 v

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO		1947

SEN-162-5.20

1/6

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS

TIFFIN-REPUBLIC-FITCHVILLE ROAD

SEN-162-5.20

SENECA COUNTY

REED TOWNSHIP

CONVENTIONAL SIGNS

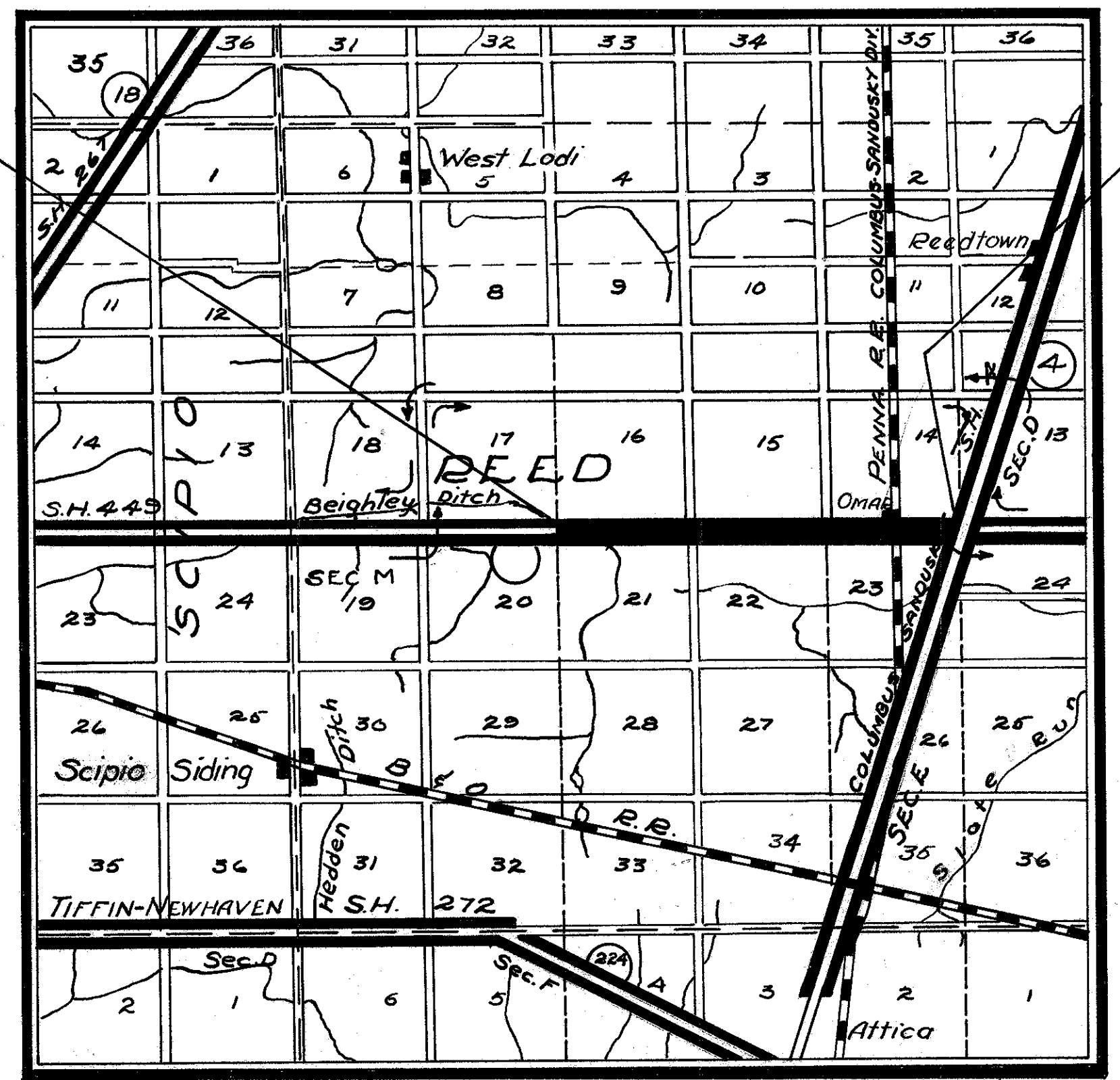
STATE LINE	----
COUNTY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
CENTER LINE	-----
PROPERTY LINE	-----
CITY OR VILLAGE LINE	-----
FENCE LINE	-x-x-x-x-
STEAM RAILROAD	====
ELECTRIC RAILROAD	-----
POLE LINE	o-o-o-o-o
GUARD RAIL	o-o-o-o-o
DRAIN PIPE, NEW	-----
DRAIN PIPE, OLD	-----

INDEX OF SHEETS

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LINE DATA

BEGIN PROJECT	STATION 426+43.3
END PROJECT	STATION 590+59
GROSS LENGTH	16,415.7 Lin. Ft.
DEDUCT FOR BRIDGE	19.00 Lin. Ft.
DEDUCT FOR RAILROAD	9.00 Lin. Ft.
TOTAL DEDUCTIONS	28.00 Lin. Ft.
NET LENGTH OF PROJECT	16,387.70 Lin. Ft. or 3.103 Miles



Delivery Point - Omar Average Haul - 1 1/2 Miles

LOCATION PLAN

SCALE 1" = 1 MILE

PORTION TO BE IMPROVED  
DETOURS SHOWN THUS  
STATE HIGHWAYS  
OTHER HIGHWAYS

SCALES

PLAN 1" = 200'  
PROFILE - HORIZONTAL 1" = 200'  
PROFILE - VERTICAL 1" = 10'

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 require the closing to traffic of the highway and that a detour will be provided as shown on the plans and estimates.

The Right-of-Way necessary for this improvement will be provided by the State of Ohio.

Approved W. B. Robinson  
Date 8-11-47 Division Deputy Director.

Approved \_\_\_\_\_  
Date \_\_\_\_\_ Chief Engineer, Bureau of Maintenance.

Approved J. R. House  
Date 8-22-47 Chief Engineer, Bureau of Bridges & R.R. Crossings.

Approved George J. Thornmyer  
Date 8-22-47 Chief Engineer, Bureau of Location & Design.

Approved \_\_\_\_\_  
Date \_\_\_\_\_ First Asst Director & Chief Engineer.

Approved Merwin D. Shaffer  
Date 8-23-47 Director of Highways.

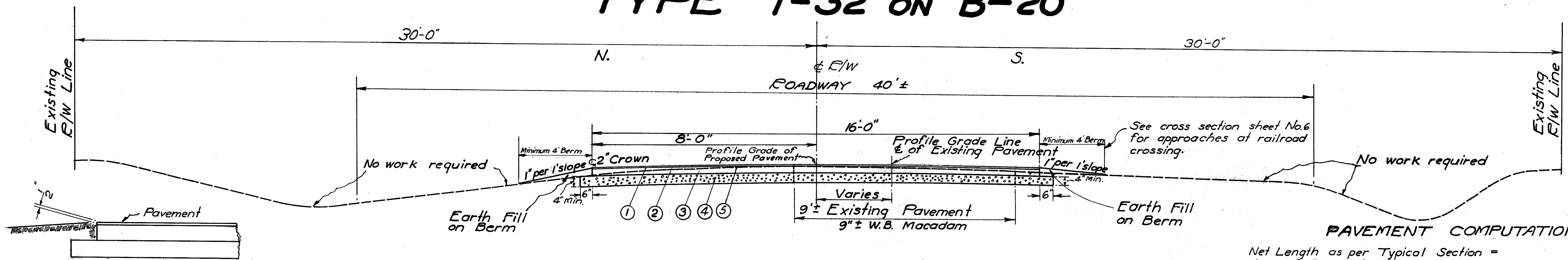
STANDARD DRAWINGS
6-8.07 2-1-47

SUPPLEMENTAL SPECIFICATIONS
112 Rev 11-6-46

CONSTRUCTION BUREAU  
JUL 19 1955  
GROUND PHOTO LAB

FILE NO.	SENECA COUNTY S.E. 162 SEC. 5.12
DATE OF LETTING	194
CONTRACT NO.	

# TYPICAL SECTION TYPE T-32 ON B-20



DETAIL SHOWING BERM TREATMENT AT EDGE OF PAVEMENT

## GENERAL NOTES

**PROFILE**—The profile grade line of the existing surface which appears on the plan and profile sheets is the grade line from which the quantities have been computed, however, it is expected that this grade line may be adjusted during construction. All adjustments shall be at the discretion of the Engineer.

**UTILITY ADJUSTMENT**—Any and all work required for Public or Private Utilities will be done by and at the expense of their respective owners unless otherwise noted in these plans.

**CONTROL POINTS**—Before construction operations begin the Engineer will reference all existing Monuments, railroad spikes, iron bolts, etc., in the survey line. Upon completion of the surfacing, the Engineer will recheck all these control points in the new pavement.

**DISPOSAL OF WASTE MATERIAL**—Any excavation which is unfit for incorporation in the improvement and which would appear unsightly, shall be covered with earth to a minimum of 18" and made to conform to the contour of the adjacent land if wasted within 300' of the right of way, without expense to the State, notwithstanding the written permission of the property owner to do otherwise. All suitable surplus material shall be used to widen berm.

**EARTHWORK**—Watering embankments, benching, density requirements and the removal of sod from the shoulders will not be required. However Item E-1 shall include the thorough compaction of embankment in layers not exceeding eight inches compacted thickness and shall include any operations of grading necessary to finish the shoulders substantially to the lines indicated on the typical section. No Provisions of the Specifications will be waived for embankment which supports any portion of the new pavement.

Typical Section applies from Sta. 426+43.3 to Sta. 433+36.1 = 692.80 Lin. Ft.  
 433+55.1 to Sta. 559+40.90 = 12,585.80 Lin. Ft.  
 559+42.90 to Sta. 590+59 = 3,109.10 Lin. Ft.  
 Net Length = 16,387.70 Lin. Ft.

- ① Item T-32, Bituminous Road Mix Surface Course.  
(Consisting of Seal Coat using Bituminous Material M-5.3, MC-4 or MC-5 applied at the rate of 0.25 Gal. per Sq. Yd. and using 0.00625 Cu. Yd. of No. 6 cover aggregate per Sq. Yd.)
  - ② Item T-32 Bituminous Road Mix—Bituminous Material M-5.3, MC-3 or MC-4, applied at the rate of 0.65 to 0.75 Gal. per Sq. Yd. using 0.0292 Cu. Yd. of No. 46 Aggregate and 0.00375 Cu. Yd. of No. 6 Choke Aggregate, Method A or B)
  - ③ Item B-20, 4" Waterbound Macadam Base Course.
  - \*④ Item SS-112, 4" Minimum Thickness Blanket Course.
  - ⑤ Item T-30, Bituminous Prime Coat, using Bituminous Material M-5.5, MS-1 or M-5.3, MC-1 applied at the rate of 0.35 gallon per sq. yd.
- \* Item SS-112 Blanket Course shall be composed of material obtained from existing Waterbound Macadam Pavement which is to be scarified and spread out to a width of 17 ft. The unit price bid shall be per Sq. Yd. instead of Cu. Yd. as per Supplemental Specification SS-112, and shall include all labor and equipment necessary to complete this item.  
 Additional new aggregate, in the estimated amount of 810 Cu. Yds shall be added to the existing material obtained from the existing pavement to provide an SS-112, Blanket Course.  
 New Aggregate shall conform to Material Specification Sec. M-2.7. Method of measurement of new aggregate shall be by conversion from tonnage in accordance with Items I-17.04 and I-17.05 of the specifications.

## PAVEMENT COMPUTATIONS

Net Length as per Typical Section =	16,387.70 Lin. Ft.
Area of Pavement = 16,387.70 x 16 ÷ 9 =	29,134 Sq. Yds.
Add for Extra Pavement Area	30 Sq. Yds.
Total Area =	29,164 Sq. Yds.
SS-112 Blanket Course = (16,287.70 - 746) x 17 ÷ 9 =	29,357 Sq. Yds.
SS-112 Blanket Course using Screenings, Sec. M-2.7 for additional New Aggregate =	810 Cu. Yds.
SS-112 Blanket Course using Screenings, Sec. M-2.7 from Sta. 555+20 to Sta. 559+40.9 and from Sta. 559+42.9 to Sta. 562+75 = 746 Lin. Ft. 746 x 17 x 1/3 ÷ 27 =	157 Cu. Yds.
Total =	967 Cu. Yds.
T-30 Bituminous Prime Coat = 29,164 x 0.35 =	10,208 Gal.
T-32 Bituminous Road Mix Surface Course Bituminous Material = 29,164 x 0.70	20,415 Gal.
No. 46 Aggregate = 29,164 x 0.0292 =	852 Cu. Yds.
No. 6 Aggregate for Choke = 29,164 x 0.00375	110 Cu. Yds.
Bituminous Material for Seal Coat = 29,164 x 0.25 = 7,291 Gal.	
No. 6 Aggregate for Seal Coat = 29,164 x 0.00625 =	182 Cu. Yds.
E-1 Roadway Excavation (Unclassified) Volume = 8 x 75 x (16,287.70 - 746) ÷ 27 =	3,454 Cu. Yds.
From Cross Section Sheet No. 6 Add	130 Cu. Yds.
Total E-1	3,584 Cu. Yds.
* I-17 Aggregate for Drives	20 Cu. Yds.
B-20 4" Waterbound Macadam Base Course Area = (16,287.70 ÷ 9) = 28,956 Sq. Yds. Add for extra area (Sta. 426+43.3 to Sta. 427+43.3) = 22 Sq. Yds. Total B-20	28,978 Sq. Yds.

## GENERAL SUMMARY

ITEM	QUANTITY	UNIT	DESCRIPTION
E-1	3,584	Cu. Yds.	Roadway Excavation
E-11	2	M-Gals.	Water
I-17	20	Cu. Yds.	Side Approaches, Mail Box Turnouts & Berm Material
SS-112	29,357	Sq. Yds.	4" Minimum Thickness Blanket Course as per Plan
SS-112	967	Cu. Yds.	New Aggregate (Screenings Sec. M-2.7)
T-32	20,415	Gal.	Road Mix Bituminous Material Sec. M-5.3, MC-3 or MC-4
T-32	292	Cu. Yds.	No. 6 Aggregate for Choke and Seal Coat
T-32	852	Cu. Yds.	No. 46 Aggregate for Road Mix
T-32	7,291	Gal.	Seal Coat Bituminous Material Sec. M-5.3, MC-4, MC-5
T-30	10,208	Gal.	Bituminous Prime Coat, sec. M-5.5, MS-1 or M-5.3, MC-1
B-20	28,978	Sq. Yds.	4" Waterbound Macadam Base Course

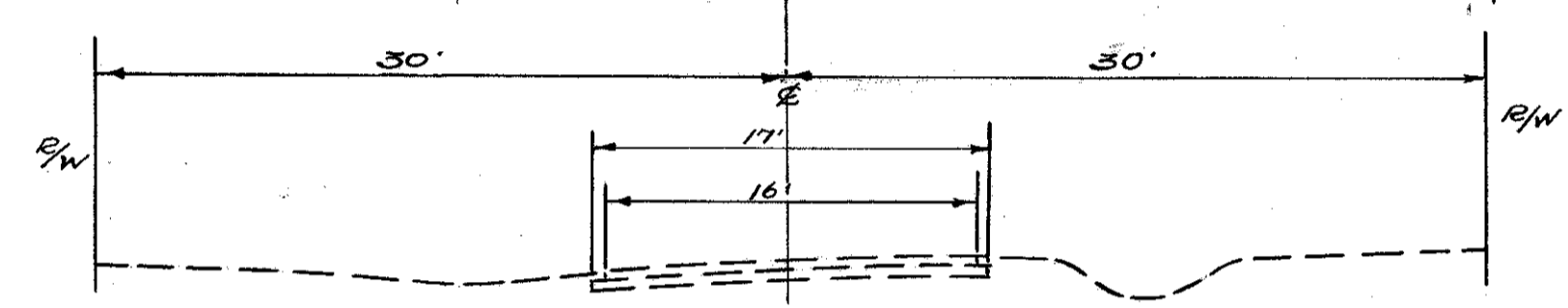
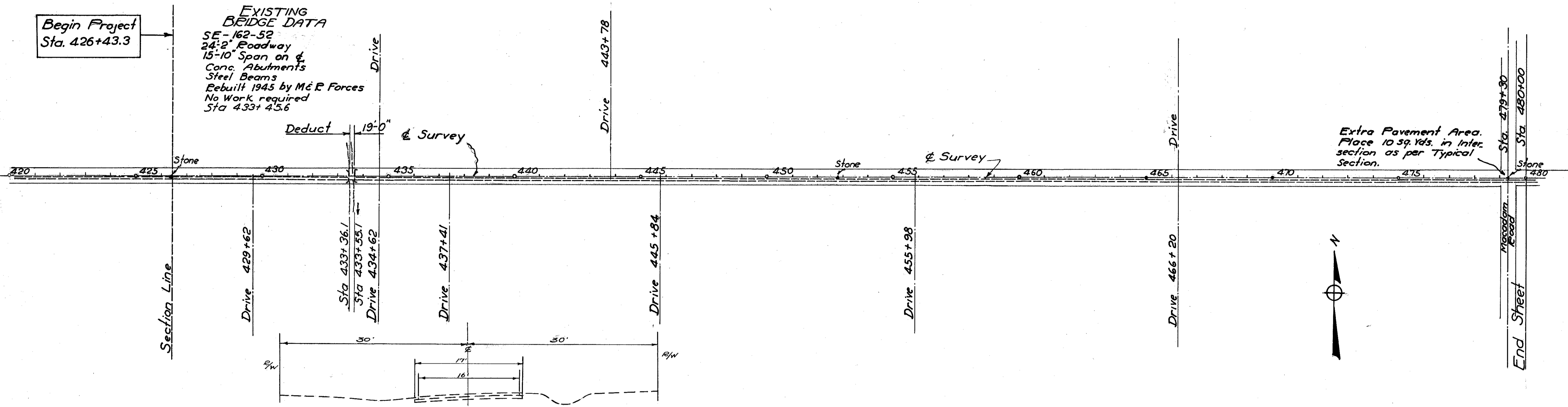
Stone- Sta. 426+43.3  
Seneca Co. MKR.  $\Delta = 0^{\circ} 27'$   
18.35' & Survey  
Seneca Co. MKR.

Stone- Sta. 452+86.5  
 $\Delta = 0^{\circ} 18' Lt$   
Stake & Survey  
Stake

Sta. 479+30  
 $\Delta = 0^{\circ} 42' Et$   
Seneca Co. MKR.  $\Delta = 49.48'$   
47.23' Seneca Co. MKR.  
N-S.

Begin Project  
Sta. 426+43.3

EXISTING  
BRIDGE DATA  
SE-162-52  
24'-2" Roadway  
15'-10" Span on 4  
Conc. Abutments  
Steel Beams  
Rebuilt 1945 by M&R Forces  
No Work required  
Sta 433+45.6



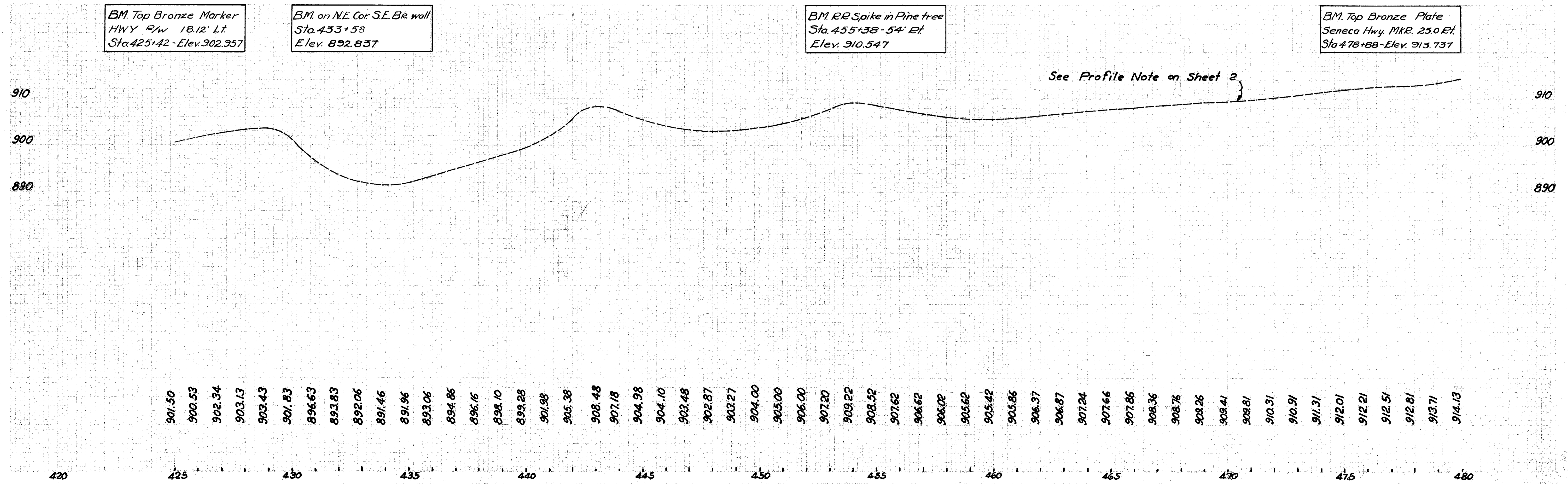
Typical Section Adjoining Pavement  
4" W.B. Macadam Pavement over 4" Blanket Course

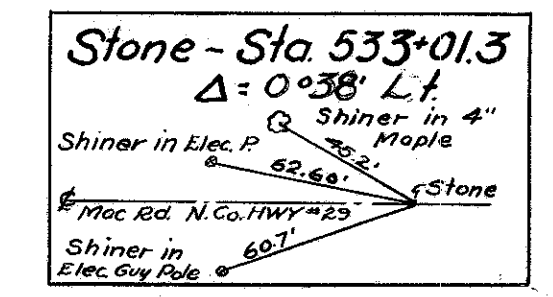
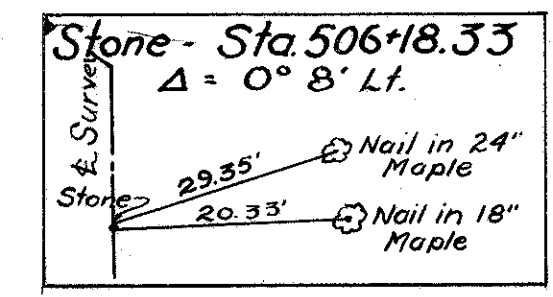
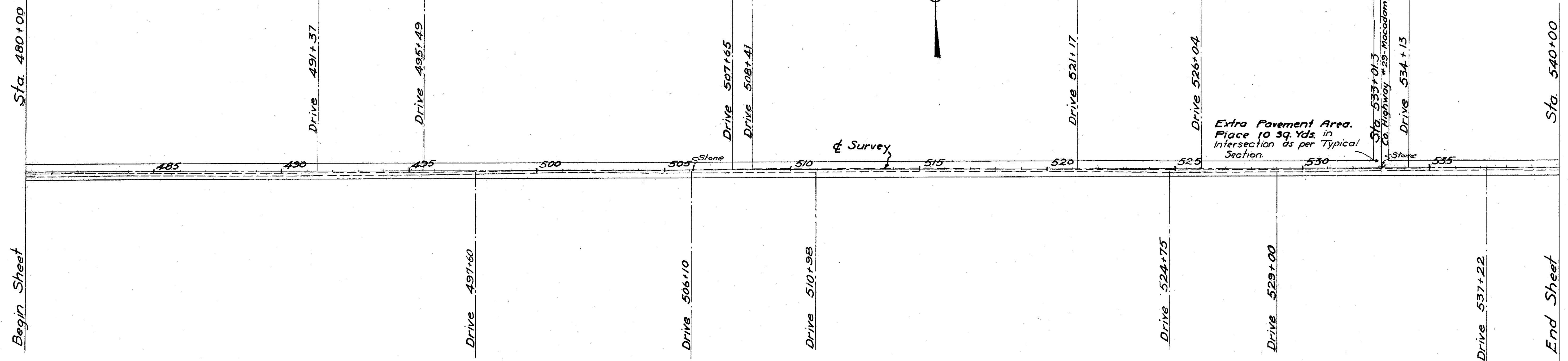
BM. Top Bronze Marker  
HWY R/W 18.12' Lt.  
Sta. 425+42 - Elev. 902.957

BM. on N.E. Cor. S.E. Br. wall  
Sta. 433+58  
Elev. 892.837

BM. RR Spike in Pine tree  
Sta. 455+38 - 54' Et.  
Elev. 910.547

BM. Top Bronze Plate  
Seneca Hwy. MKR. 25.0 Et.  
Sta. 478+88 - Elev. 913.737

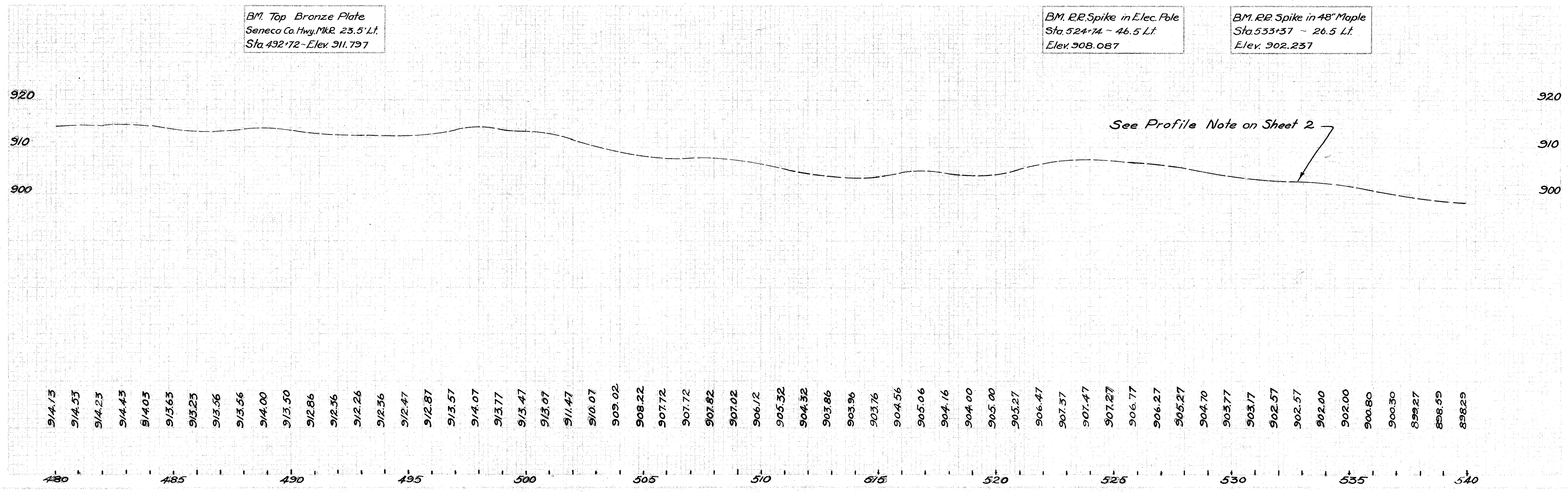




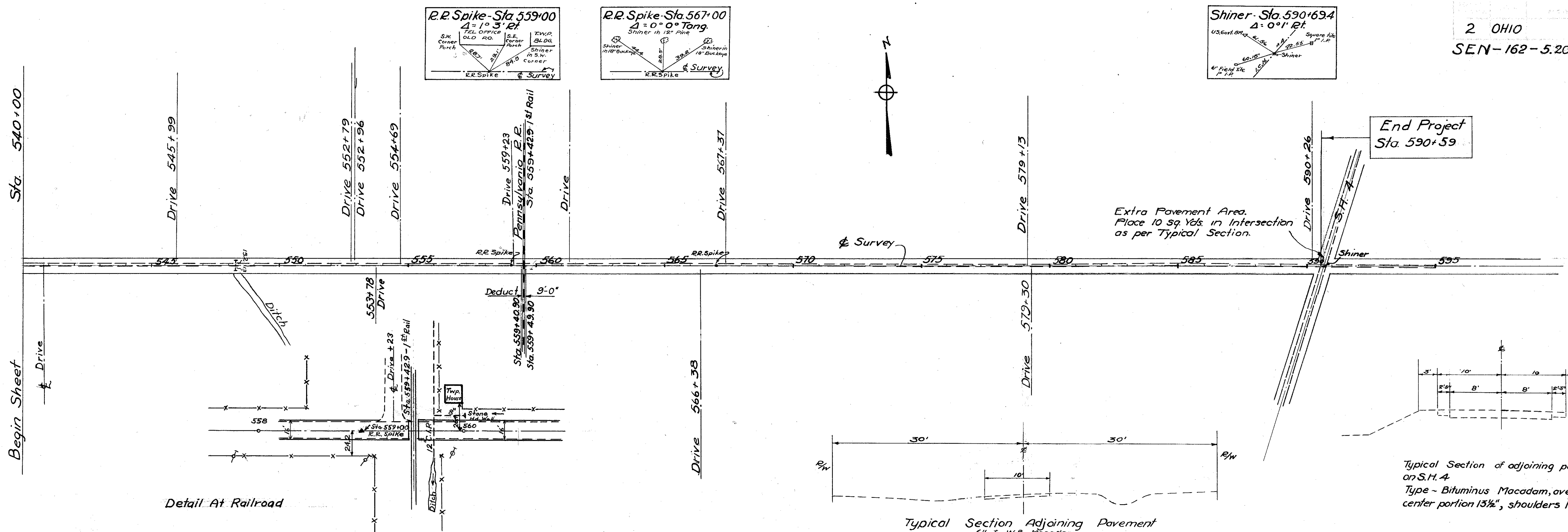
BM. Top Bronze Plate  
 Seneca Co. Hwy. MKR. 23.5' Lt.  
 Sta. 492+72 - Elev. 911.797

BM. RR. Spike in Elec. Pole  
 Sta. 524+74 - 46.5 Lt.  
 Elev. 908.087

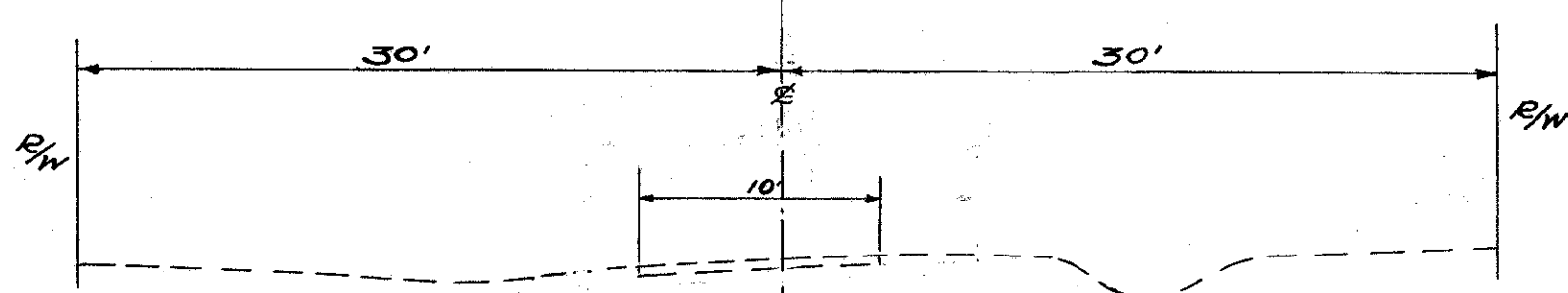
BM. RR. Spike in 48" Maple  
 Sta. 533+37 - 26.5 Lt.  
 Elev. 902.237



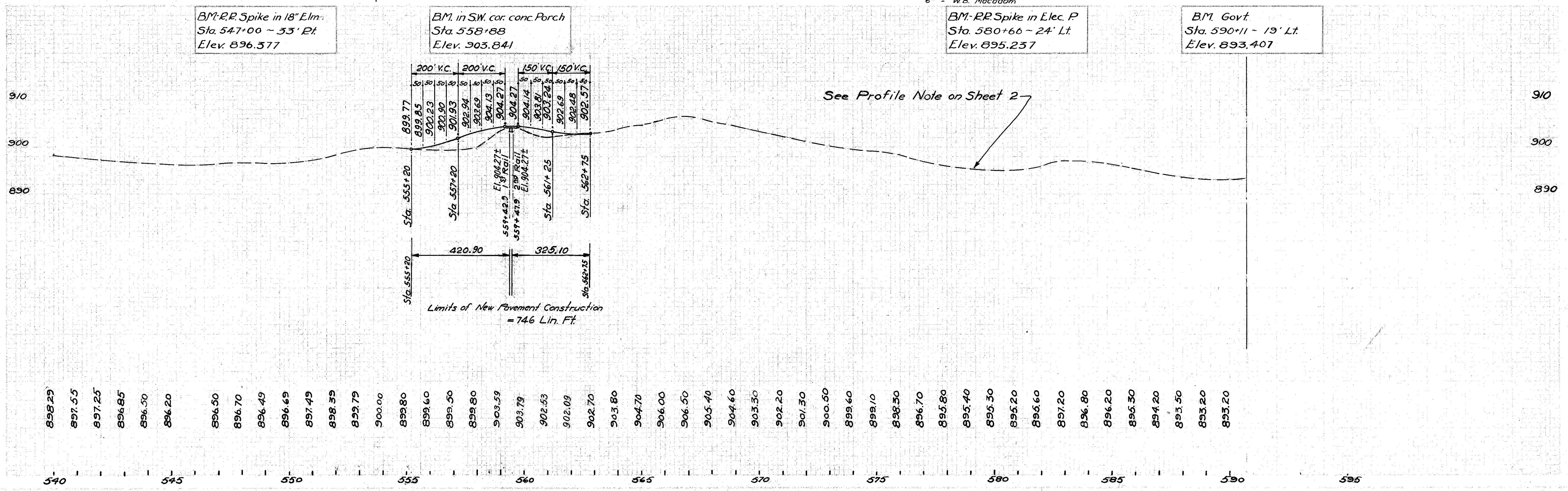
- 914.13
- 914.53
- 914.23
- 914.43
- 914.03
- 913.63
- 913.23
- 913.56
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- 914.00
- 913.50
- 912.86
- 912.36
- 912.26
- 912.36
- 912.47
- 912.87
- 913.57
- 914.07
- 913.77
- 913.47
- 913.07
- 911.47
- 910.07
- 909.02
- 908.22
- 907.72
- 907.72
- 907.82
- 907.02
- 906.12
- 905.32
- 904.52
- 903.86
- 903.96
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- 902.57
- 902.57
- 902.00
- 902.00
- 900.80
- 900.30
- 899.27
- 898.59
- 898.29



Detail At Railroad



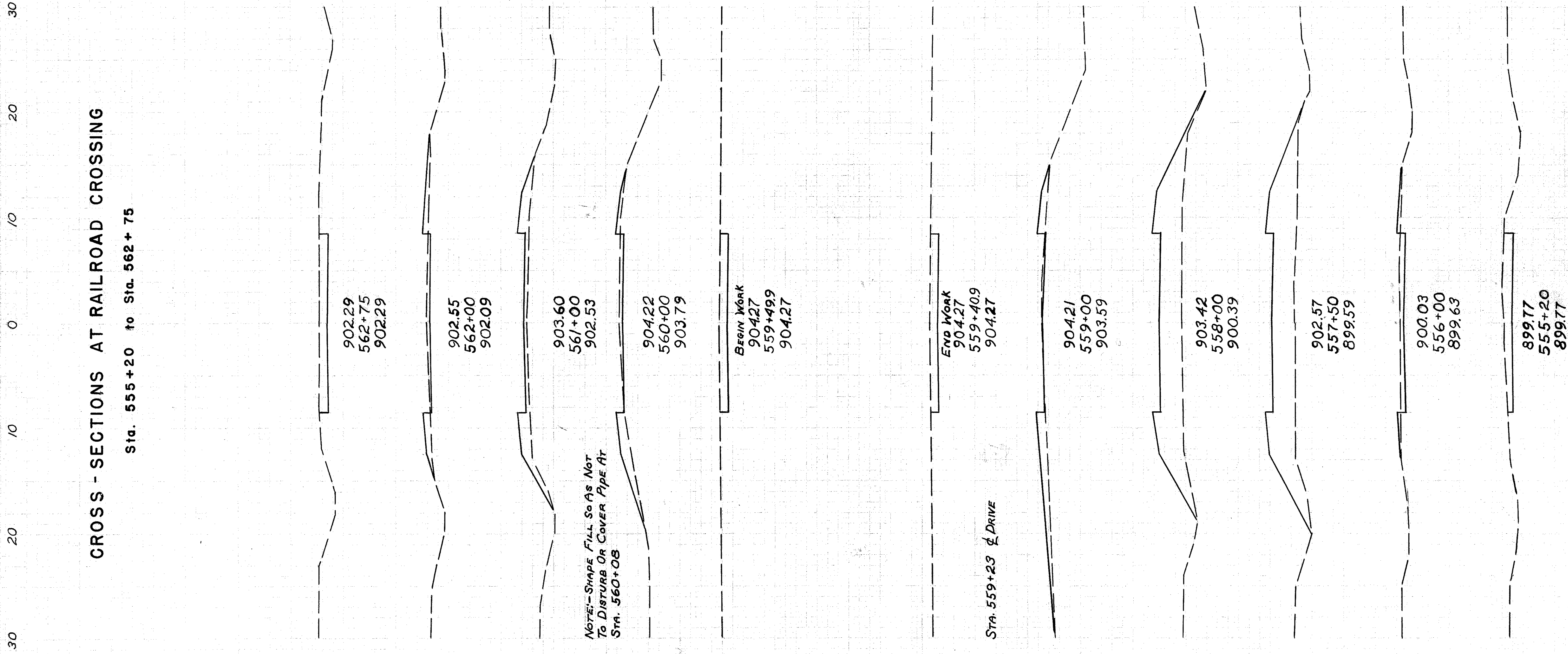
Typical Section of adjoining pavement on S.H. 4  
 Type - Bituminous Macadam, average depth - center portion 13", shoulders 10".



SEN. - 162 - 5.20

CROSS - SECTIONS AT RAILROAD CROSSING

Sta. 555+20 to Sta. 562+75



TOTAL

130.

CUT

666.

FILL

30 20 10 0 10 20 30

502.25