

Oconto Co.
C.T.H. "H"
9108-1-72
Gillett - C.T.H. "M" Rd.
Solec (2) (Payne)

Index of Sheets

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Sheet No.	-	Miscellaneous Quantities
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Total Sheets = 14



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED
GILLETT-C.T.H. "M" ROAD

(HINTZ - S.T.H. 32 SECTION)

C.T.H. "H"
OCONTO COUNTY

PROJECT IDENTIFICATION NUMBER	FEDERAL PROJECT DESIGNATION
9108-1-72	S 0186(2)

'As Built' Plan

Sheet Number	Total Sheets
1	

Design Designation

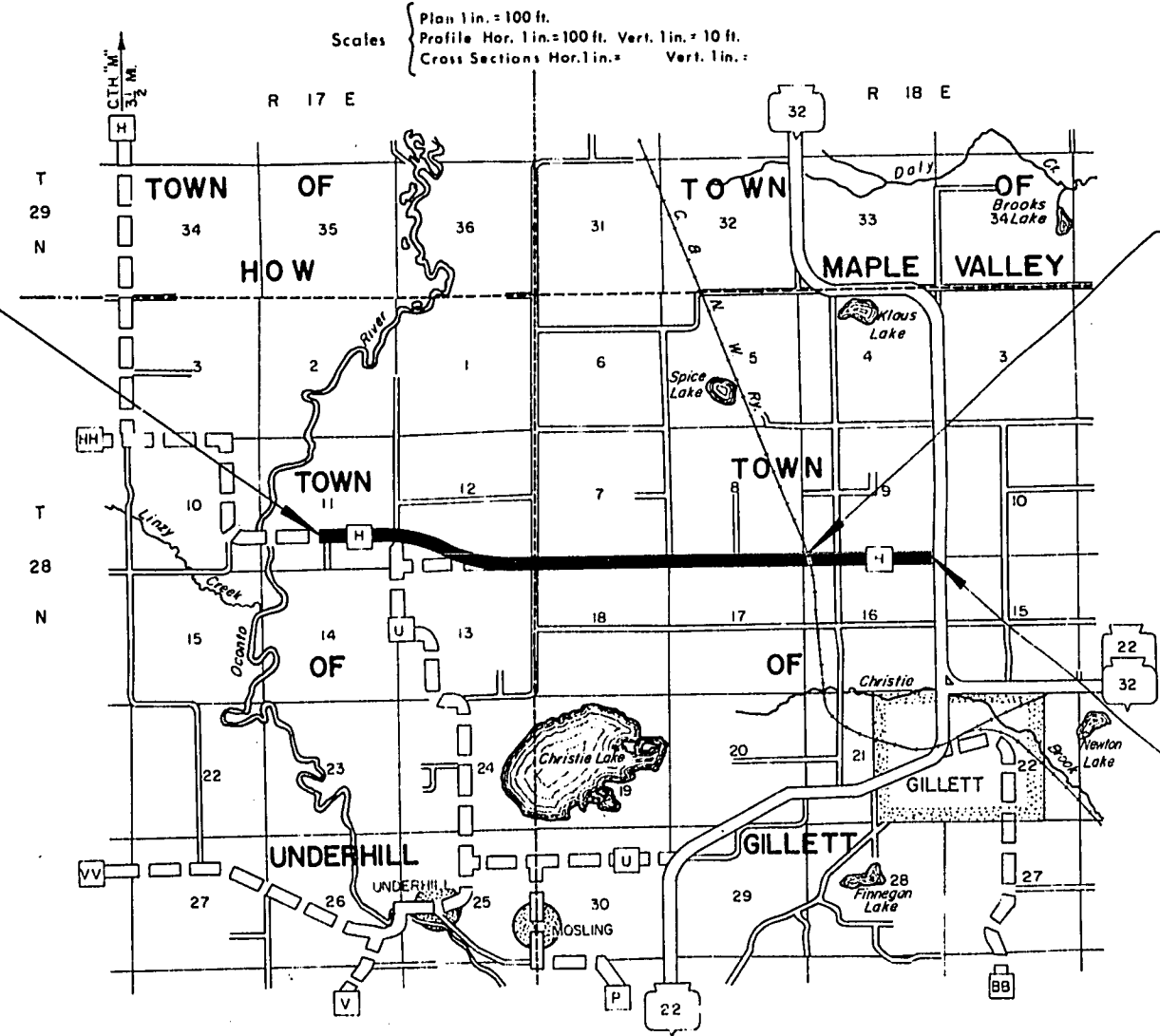
A.D.T. (1971)	205
A.D.T. (1991)	340
D.H.V.	50
D.	50%
T.	9%
V.	50 M.P.H.

BEGINNING OF PROJECT S 0186(2) / 9108-1-72
STA. 137+50
1,342 FEET NORTH & 137 FEET WEST OF THE
SOUTH 1/4 CORNER OF SECTION 11, T. 28 N., R. 17 E.
= BEGINNING OF PROJECT S 0186(1) / 9108-1-71
STA. 137+50

State Line	-----
County Line	-----
Township or Range Line	-----
Section Line	-----
New Right of Way Line	-----
Present Right of Way Line	-----
Wire Fence	{ Woven Barbed }
Lot Line	-----
Corporate or City Limits	-----
Property Line	-----
Traveled Way or P.E.	-----
Railroads	-----
Base or Survey Line	-----
Culvert Pipe Class III	C.P. CL. III
Corrugated Metal Culvert Pipe	C.M.C.P.

Conventional Signs

Culverts in Place	-----
Culverts Required	-----
Drop Inlet	-----
Power Pole	-----
Telephone or Telegraph Pole	-----
Right of Way Markers	-----
Reference Stake for Hubs Only	-----
Marsh	-----
Hedge	-----
Trees	-----
Ground Elevation	Datum Line 73.9
Grade Elevation	Datum Line 76.16
Field Entrance	F.E.
Private Entrance	P.E.



Total Net Length of Centerline = 4.534 Mi. (Rural)

STA. 328+63.36 TO STA. 328+76.44
EXCEPTION TO NET & LENGTH

END OF PROJECT S 0186(2) / 9108-1-72
STA. 377+00
224 FEET WEST OF THE SOUTHEAST CORNER OF
SECTION 9, T. 28 N., R. 18 E.
= END OF PROJECT S 0186(1) / 9108-1-71, STA. 377+00

APPROVED FOR	
OCONTO COUNTY BY	
Date	County Highway Commissioner
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
Surveyor D.G.N.	Note Book 887,888
District Computer K.O.H.	M.O. Checker R.A.H.
District Checker R.G.P.	Correct
Correct:	
Date 4-14-72	H. J. J. J.
Recommended for Approval: District Engineer	
Date 4-25-72	J. C. H. H.
Approved: Chief Design Engineer	
Date 4/25/72	S. E. E. E.
State Highway Engineer	
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
REGION 4 WISCONSIN DIVISION	
Approved:	
Date	Division Engineer

S 0186(2)

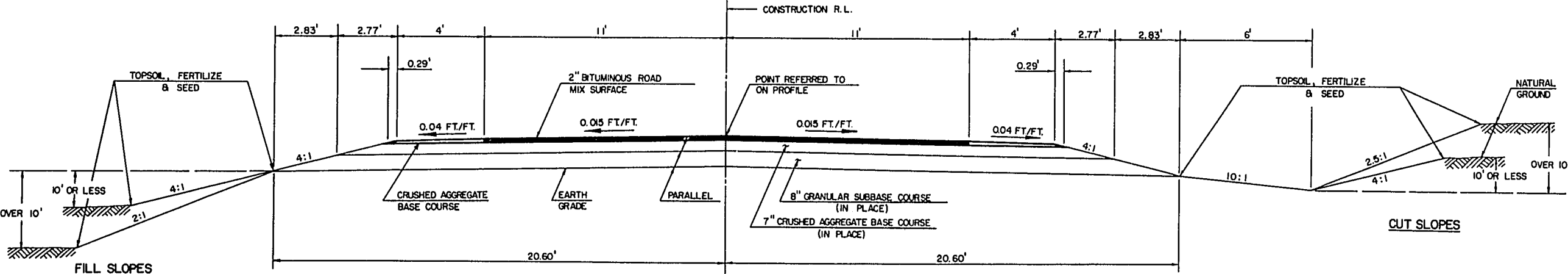
ESTIMATE OF QUANTITIES

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE WISCONSIN DIVISION OF HIGHWAYS—EDITION OF 1969, APPROVED MARCH 3, 1969 FEDERAL AID REQUIRED CONTRACT PROVISIONS APPROVED NOVEMBER 15, 1968, AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

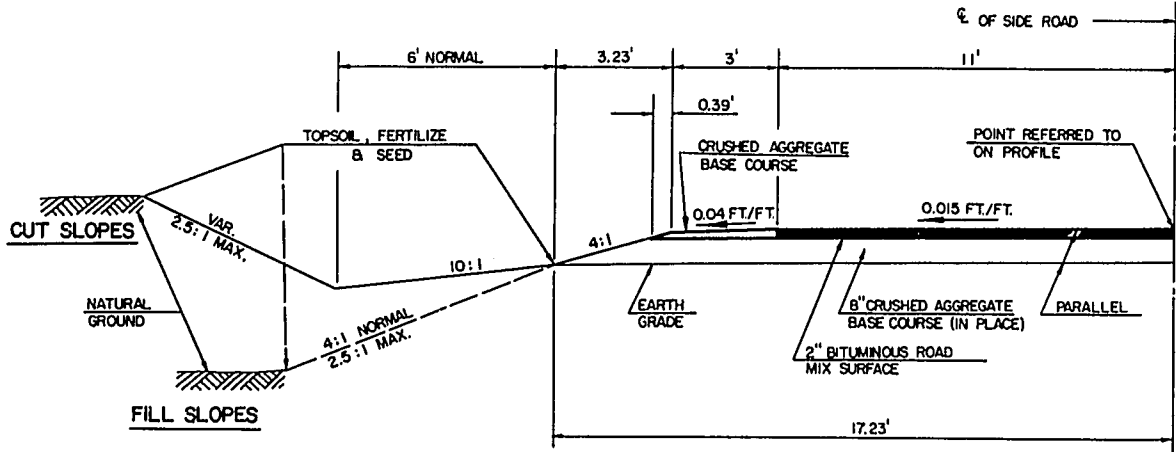
CONTRACT NO. 1 (9108-1-72)
SURFACING (BITUMINOUS
ROAD MIX)

PROJECT I. D. 9108-1-72	SHEET NUMBER 2	TOTAL SHEETS
FEDERAL PROJECT DESIGNATION S 0186 (2)		

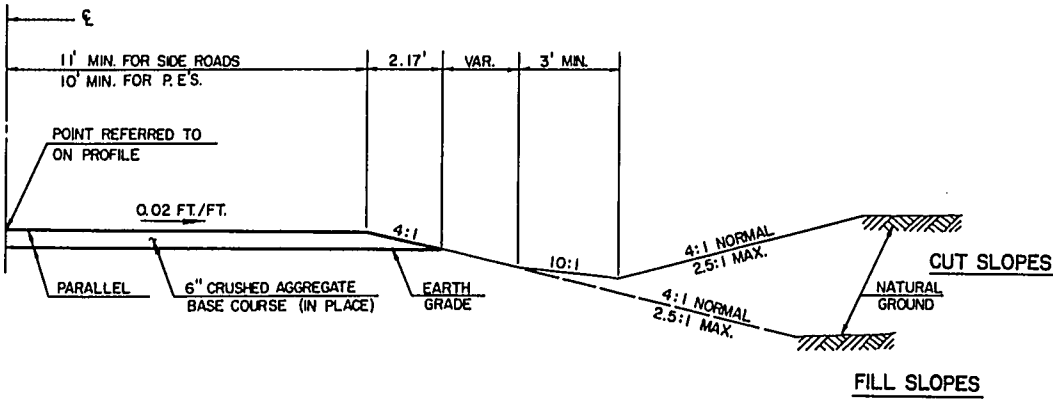
SEC.	NO.	STATION TO STATION	NET LENGTH OF CENTER LINE	BITUMINOUS MATERIAL FOR PRIME COAT	BITUMINOUS ROAD MIX SURFACE	BITUMINOUS MATERIAL FOR SURFACE COURSE	AGGREGATES FOR ROAD MIX SURFACE	CRUSHED AGGREGATE BASE COURSE	
		ITEM NO. UNIT	LIN. FT.	40202 GAL.	40401 SQ. YD.	40403 GAL.	40406 CU. YD.	90001 SQ. YD.	
1		137+50 - 377+00	23,936.92	10,135	61,940	86,750	4,820	23,650	
1		TOTALS	23,936.92	10,135	61,940	86,750	4,820	23,650	



TYPICAL FINISHED SECTION



1/2 TYPICAL FINISHED SECTION FOR SIDE ROADS WITH BITUMINOUS SURFACE



1/2 TYPICAL SECTION FOR CRUSHED AGGREGATE SURFACE
SIDE ROADS AND FOR PRIVATE ENTRANCES

CRUSHED AGGREGATE BASE COURSE		
LOCATION	SQ. YD.	* CU. YDS. (APPROXIMATE)
137+50 - 377+00 (SHOULDERS)	23,650	1,600

* CUBIC YARDS INCLUDE COMPACTION

GENERAL NOTES

ITEMS LISTED ON THE PLAN AND PROFILE SHEETS AND NOT LISTED IN THE ESTIMATE OF QUANTITIES ARE NOT A PART OF THIS CONTRACT. QUANTITIES MEASURED FOR PAYMENT BY THE SQUARE OR CUBIC YARD ARE GIVEN APPROXIMATE THICKNESS ON THE PLAN, THE ACTUAL THICKNESS SHALL DEPEND ON DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

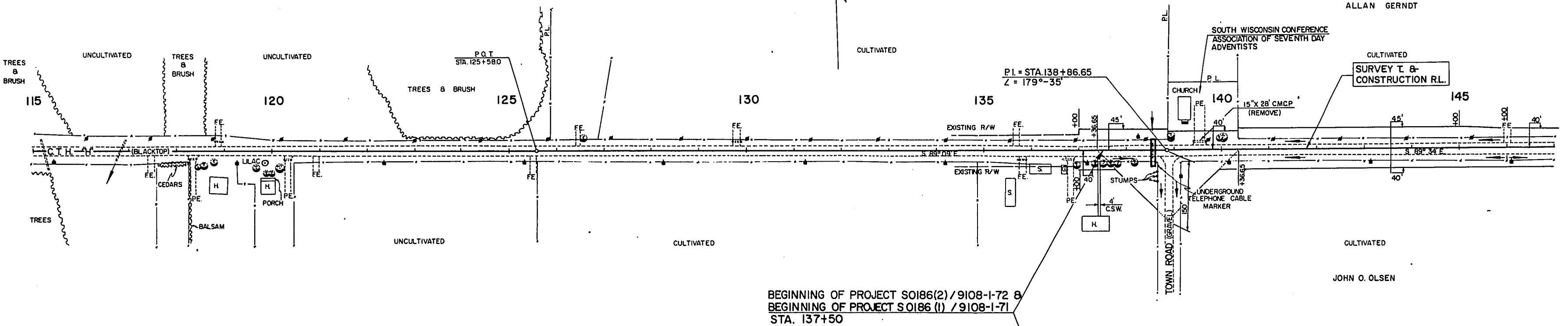
STANDARD DETAIL DRAWINGS

DESIGN DETAILS FOR SIDE ROAD AT GRADE INTERSECTIONS — 9A1-1
PAVEMENT DETAILS FOR RAILROAD APPROACH — 13B1-1
CONSTRUCTION BARRICADE — 15C1-1

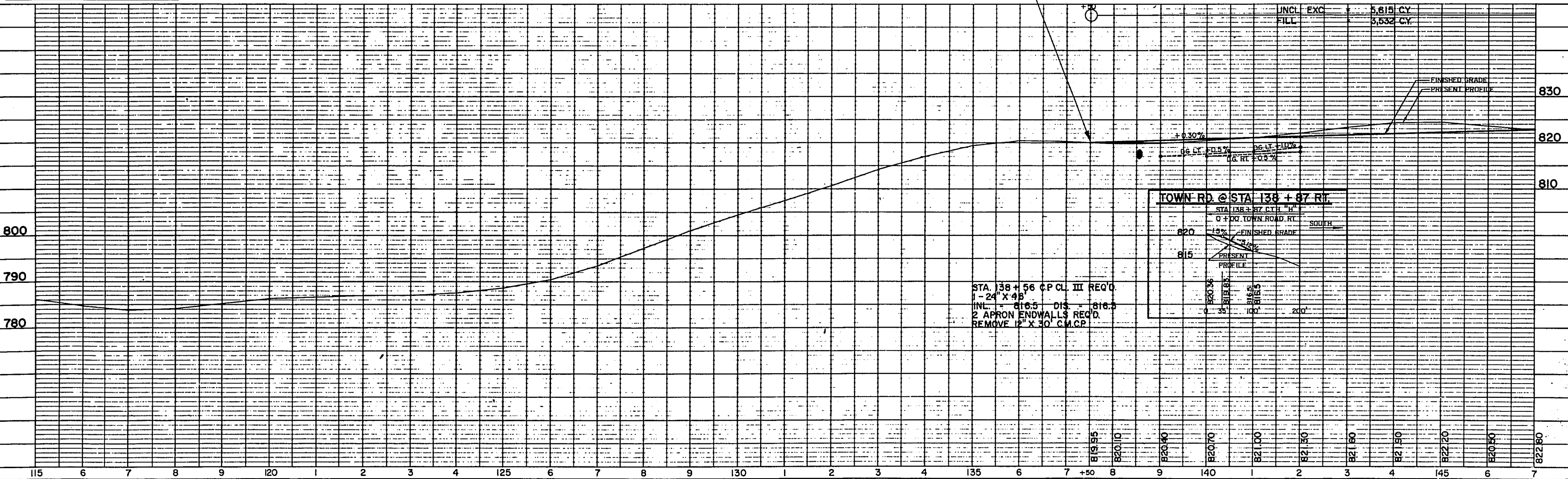
BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
103	126+10	SPIKE IN 6" ELM	175' LT.	787.81
104	139+17	PM SW COR. BOT. CONC. STEP	54' LT.	820.37

PROJECT ID	9108-1-71	SHEET NUMBER	4	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186(1)				

9108-1-72 / S0186(2) 5



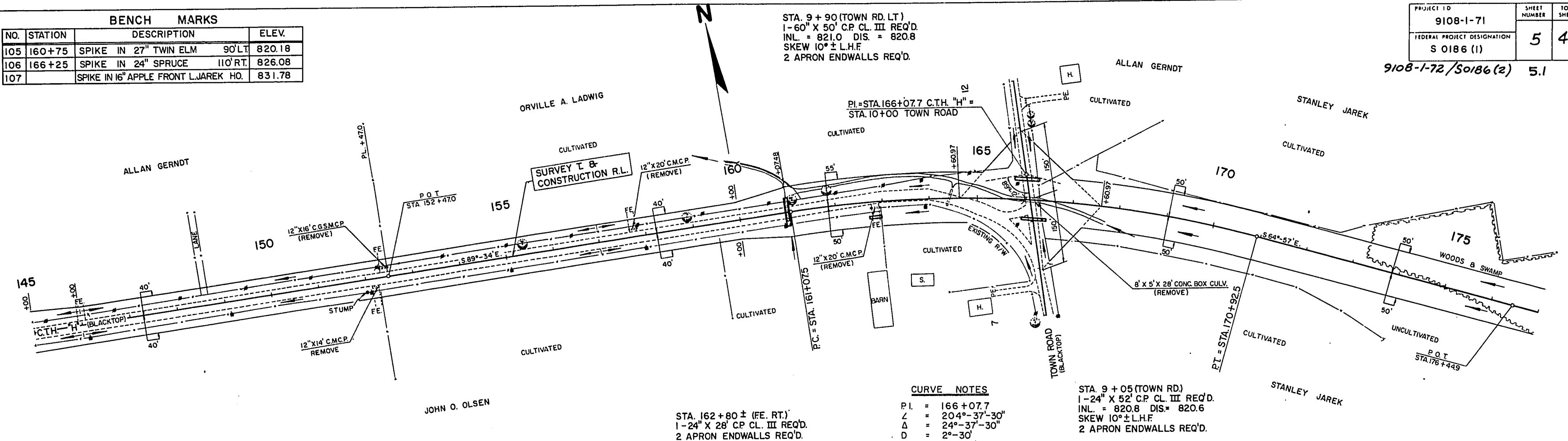
NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
137+50	145+00	750.00



BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
105	160+75	SPIKE IN 27" TWIN ELM 90' LT		820.18
106	166+25	SPIKE IN 24" SPRUCE 110' RT		826.08
107		SPIKE IN 16" APPLE FRONT L. JAREK HO.		831.78

PROJECT ID	9108-1-71	SHEET NUMBER	5	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (1)				

9108-1-72/S0186(2) 5.1



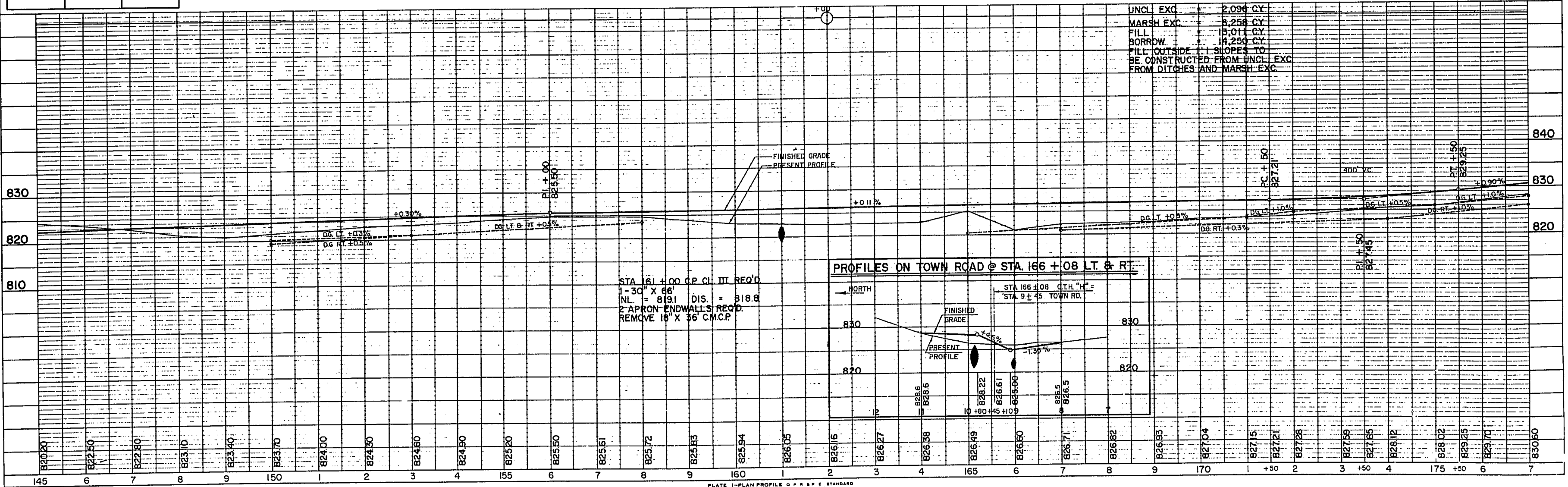
NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
145+00	175+00	3,000.00

CURVE NOTES

P.I. = 166+07.7
 Z = 204°-37'-30"
 Δ = 24°-37'-30"
 D = 2°-30"
 T = 500.22'
 L = 985.00'
 R = 2,291.83'
 S.E. = 0.046 FT/FT.
 R.O. = 150'

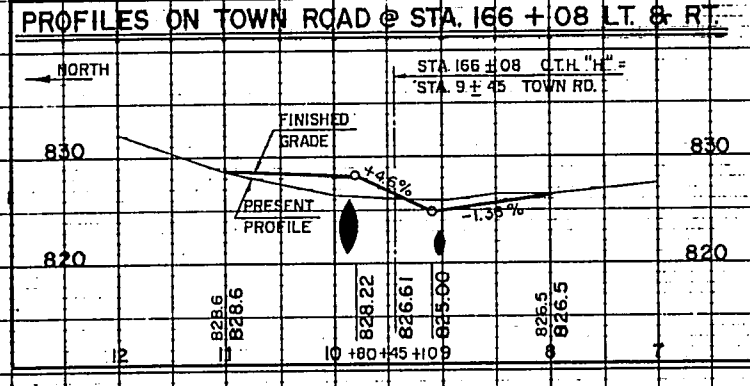
STA. 9+05 (TOWN RD.)
 1-24" X 52' C.P. CL. III REQ'D.
 INL. = 820.8 DIS. = 820.6
 SKEW 10°± L.H.F.
 2 APRON ENDWALLS REQ'D.

STA. 166+08± (TOWN RD. LT. & RT.)
 DESIGN TYPE "C" INTERSECTION REQ'D.
 (SEE STANDARD DETAIL DRAWING)



UNCL. EXC. 2,098 CY
 MARSH EXC. 6,258 CY
 FILL 18,011 CY
 BORROW 14,250 CY
 FILL OUTSIDE 1:1 SLOPES TO BE CONSTRUCTED FROM UNCL. EXC. FROM DITCHES AND MARSH EXC.

STA. 161+00 C.P. CL. III REQ'D.
 1-30" X 66"
 INL. = 819.1 DIS. = 818.8
 2 APRON ENDWALLS REQ'D.
 REMOVE 18" X 36" C.M.C.P.

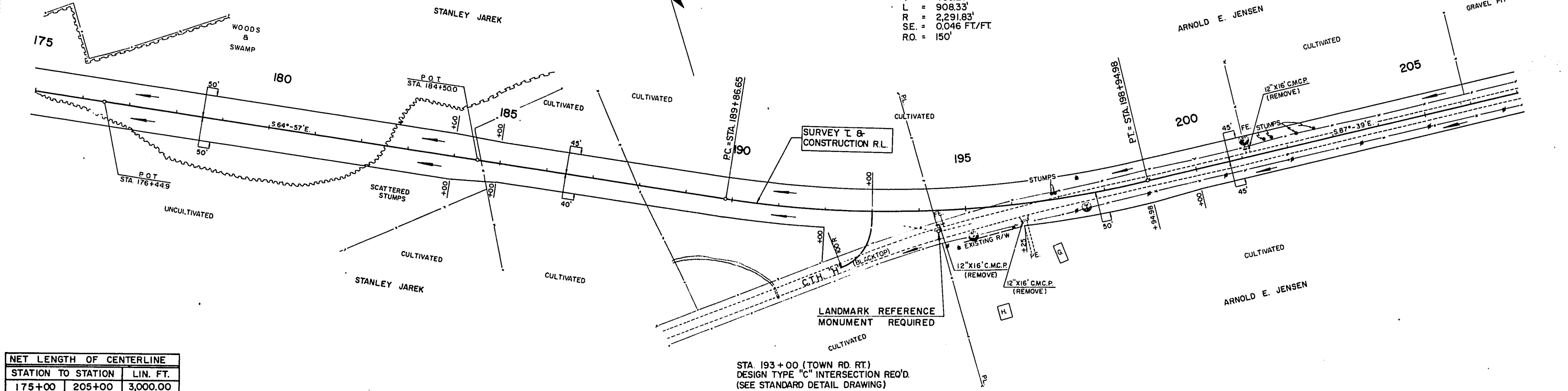


BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
108	188+00	SPIKE IN 24" ELM	300' RT.	842.02
109	195+85	SPIKE IN 18" BOXELDER	250' RT.	847.55
110	201+10	SPIKE IN 22" ELM	250' LT.	850.42

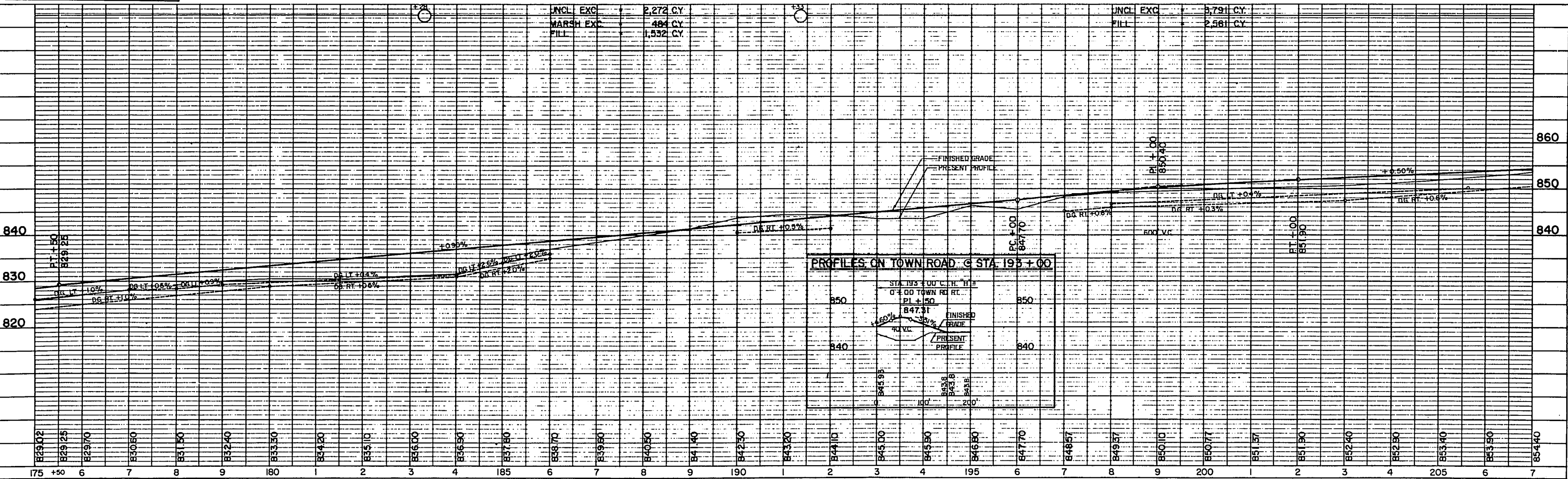
PROJECT NO	9108-1-71	SHEET	6	TOTAL	46
FEDERAL PROJECT DESIGNATION	S 0186 (1)				

9108-1-72/SO186(2) 5.2

CURVE NOTES
 PI = 194+46.86
 Z = 157°-17'-30"
 Δ = 22°-42'-30"
 D = 2°-30'
 T = 460.21'
 L = 908.33'
 R = 2,291.83'
 SE = 0.046 FT/FT
 RO = 150'



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
175+00	205+00	3,000.00

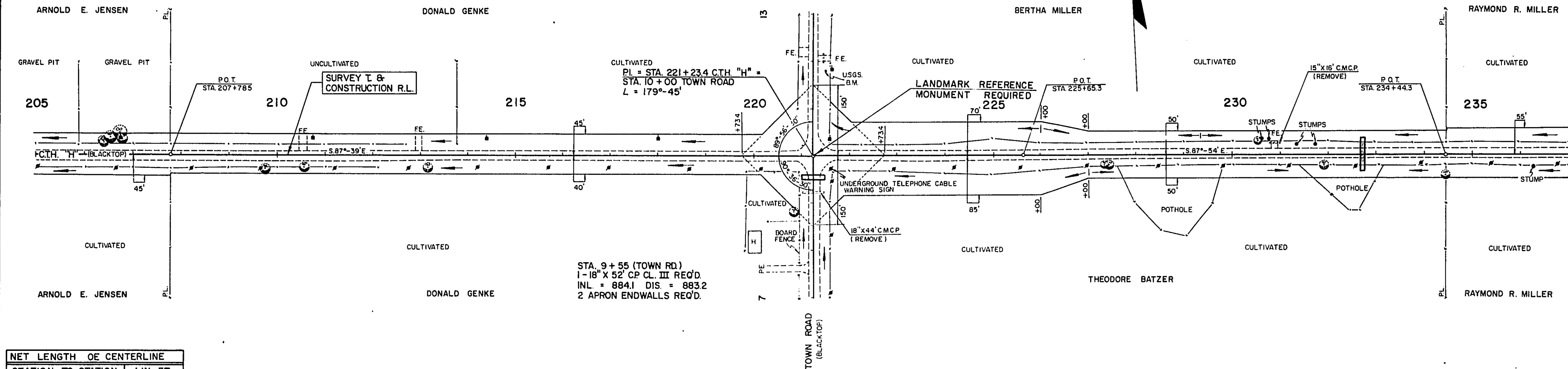


BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
111	207+78	SPIKE IN 14" ELM 175' LT	855.90
		U.S.G.S. "2 HK 1955"	884.62
112	234+43	SPIKE IN 12" ELM 42' RT	902.31

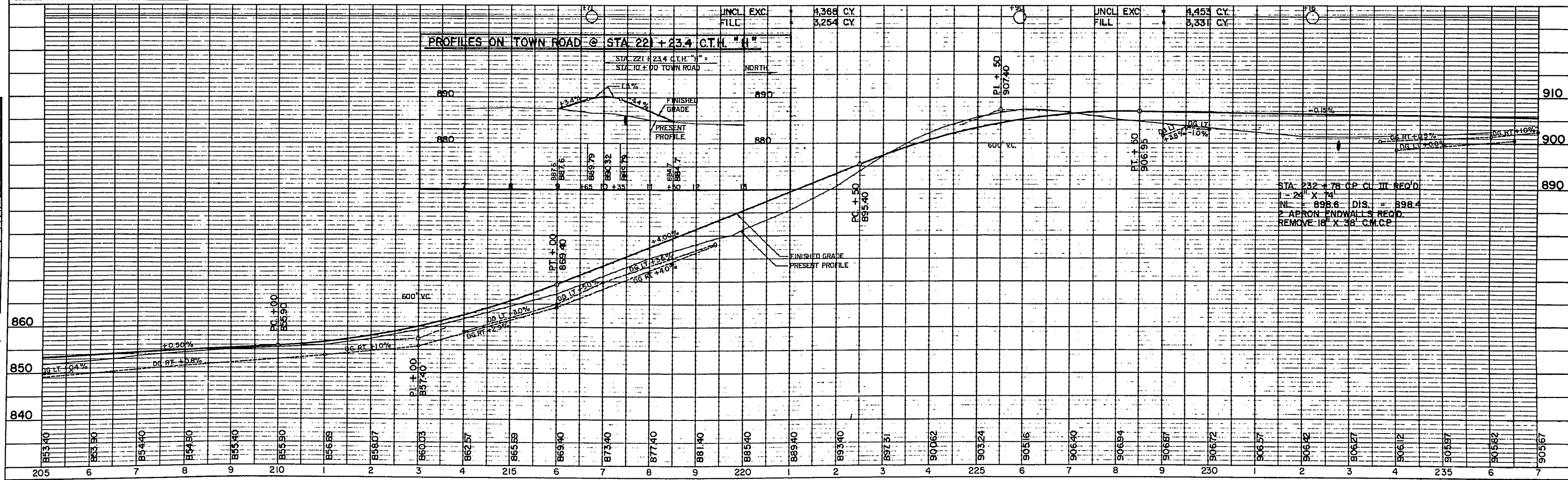
STA. 221 + 234 (TOWN RD. LT. & RT.)
DESIGN TYPE "C" INTERSECTION REQ'D.
(SEE STANDARD DETAIL DRAWING)

PROJECT NO.	9108-1-71	SHEET NUMBER	7	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (1)				

9108-1-72/S0186(2) 5.3



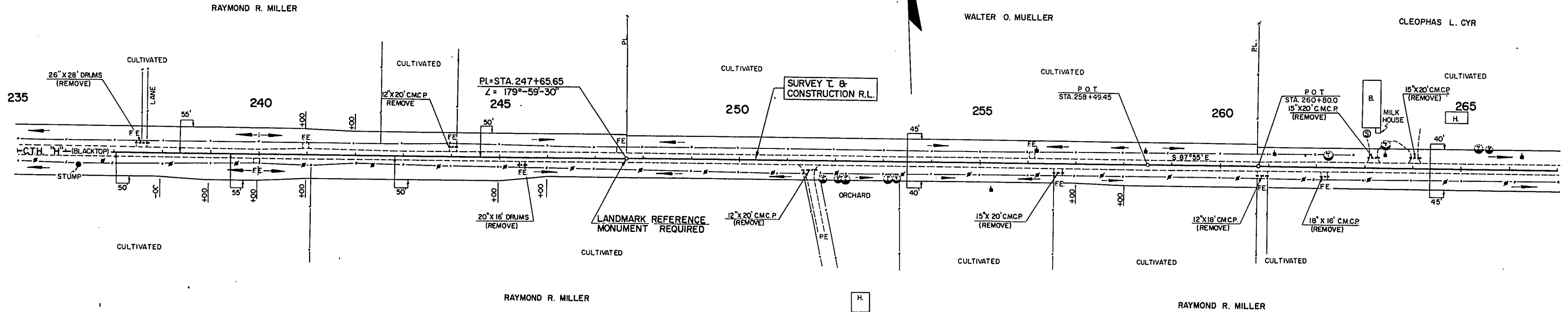
NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
205+00	235+00	3,000.00



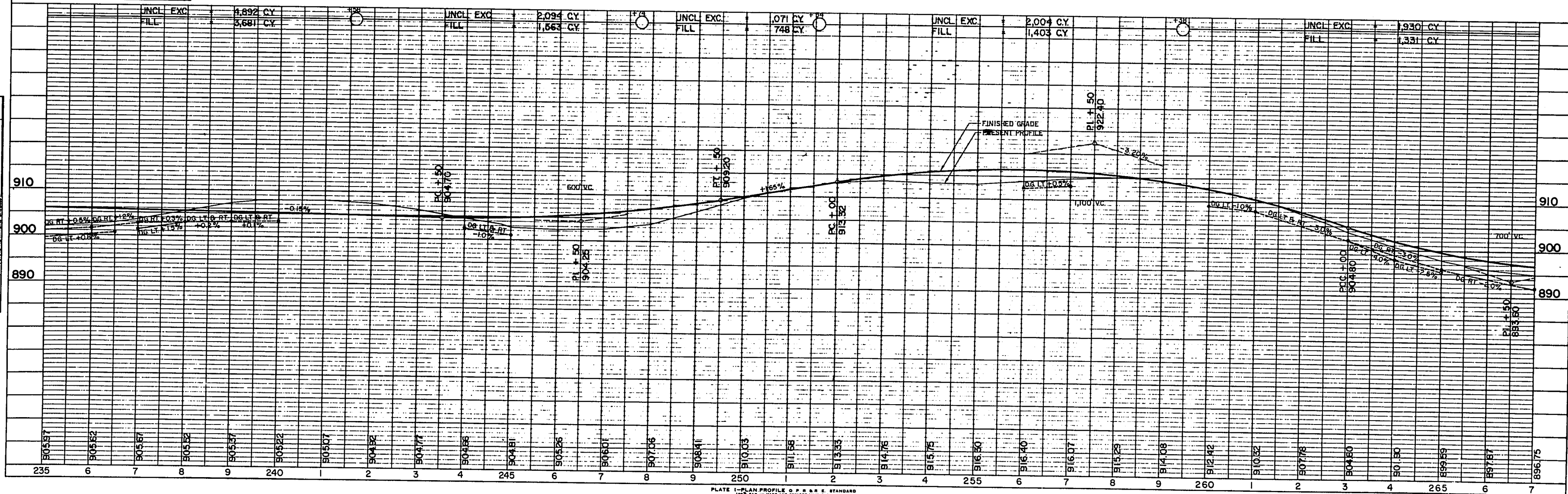
BENCH MARKS				
NO.	STATION	DESCRIPTION		ELEV.
113	252+15	SPIKE IN 18" APPLE	60' RT	913.41
114	264+68	SPIKE IN 18" ASH	85' LT	898.06

PROJECT ID.	9108-1-71	SHEET NUMBER	8	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (1)				

9108-1-72/S0186(2) 5.4



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
235+00	265+00	3,000.00

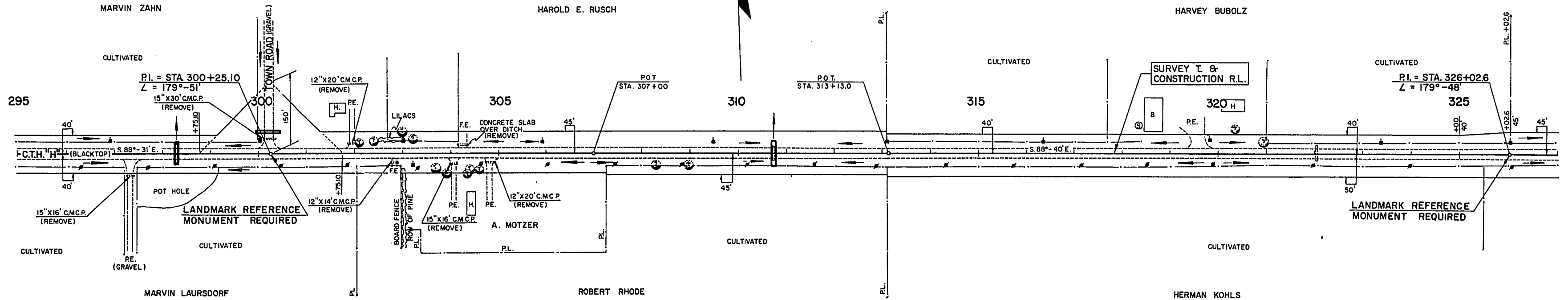


BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
118	297+48	SPIKE IN TELEPHONE POLE 80' RT.	878.73
119	301+45	SPIKE IN 18" B.E.	884.23
120	304+95	SPIKE IN 16" ASH	891.04
121	320+00	SPIKE IN 14" MAPLE 80' LT.	891.42

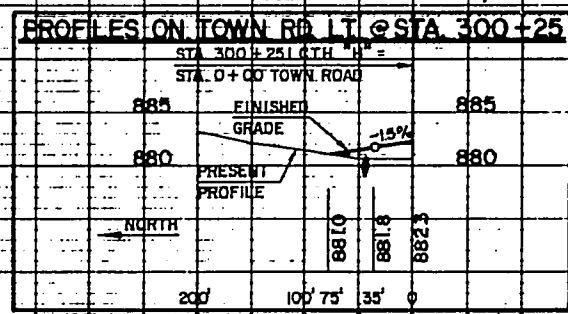
STA. 300 + 25.10 (TOWN RD. LT.)
 DESIGN TYPE "C" INTERSECTION REQ'D.
 (SEE STANDARD DETAIL DRAWING)
 1-18" X 40' C.P. CL. III REQ'D.
 2 APRON ENDWALLS REQ'D.

PROJECT NO.	SHEET NUMBER	TOTAL SHEETS
9108-1-71	10	46
FEDERAL PROJECT DESIGNATION S 0186 (I)		

9108-1-72/50/86(2) 5.6



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
295+00	325+00	3,000.00



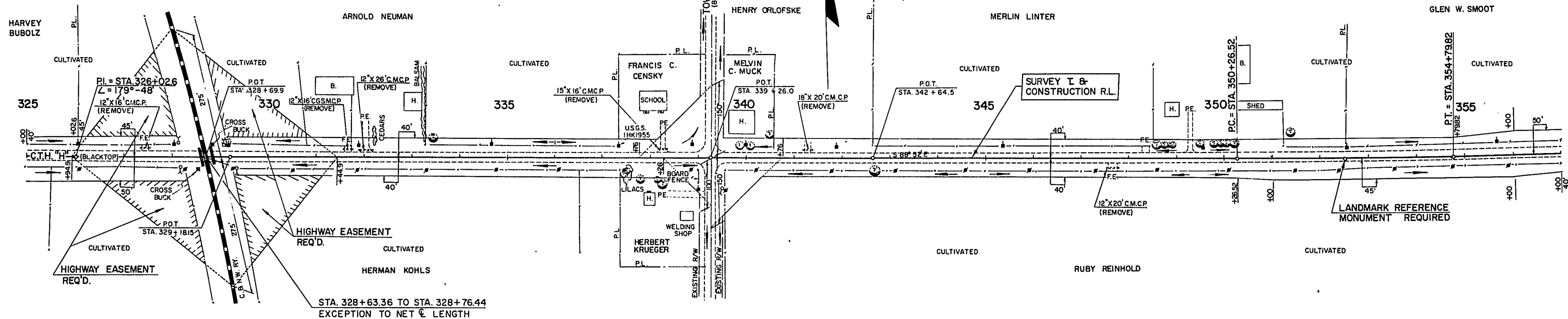
BENCH		MARKS	
NO.	STATION	DESCRIPTION	ELEV.
122	328+50	SPIKE IN 24" OAK 175' RT.	890.61
123	332+15	SPAKE IN 10" MAPLE 90' LT.	894.85
124	338+35	PAINT MARK ON TOP OF BOTTOM STEP (S.E. CORNER OF EAST STEPS) OF SCHOOL 85LT	892.15
125	351+39	SPIKE IN 30" OAK 50' LT.	892.92

CURVE NOTES

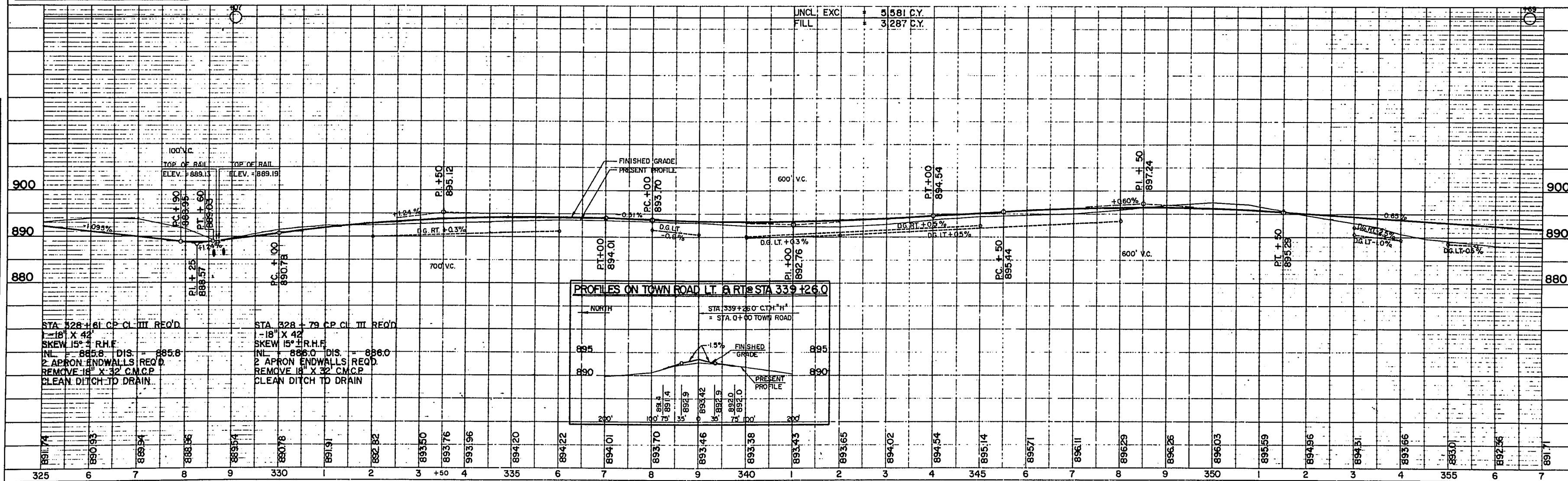
P.I.	=	352+53.2
L	=	178°-52'
Δ	=	1°-08'
D	=	0°-15'
T	=	226.68'
L	=	453.32'
R	=	22,918.31
S.E.	=	N.C.

PROJECT ID.	SHEET NUMBER	TOTAL SHEETS
9108-1-71	11	46
FEDERAL PROJECT DESIGNATION S 0186(1)		

9108-1-72/S0186(2) 5.7



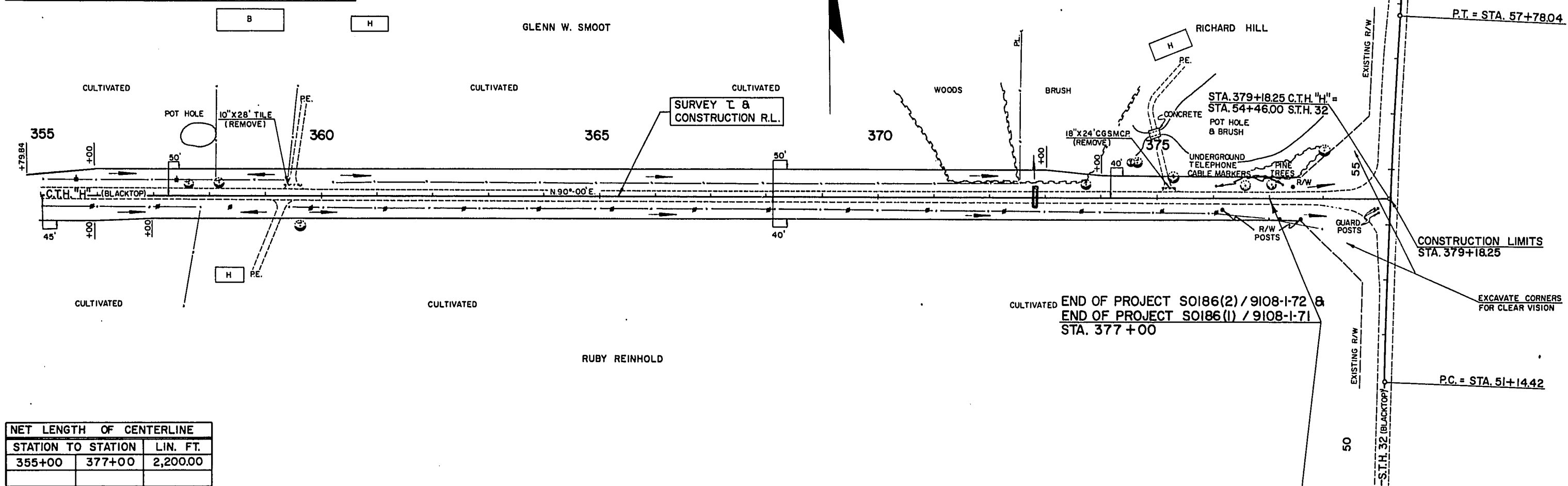
NET LENGTH OF CENTERLINE		
STATION TO STATION		LIN. FT.
325+00	355+00	2,986.92



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
126	359+67	SPIKE IN 10" APPLE	50' RT. 889.07
127	370+80	SPIKE IN 10" OAK	100' LT. 875.95
128	374+60	SPIKE IN 20" PINE	70' LT. 871.39
129	377+70	SPIKE IN 13" PINE	70' LT. 871.71

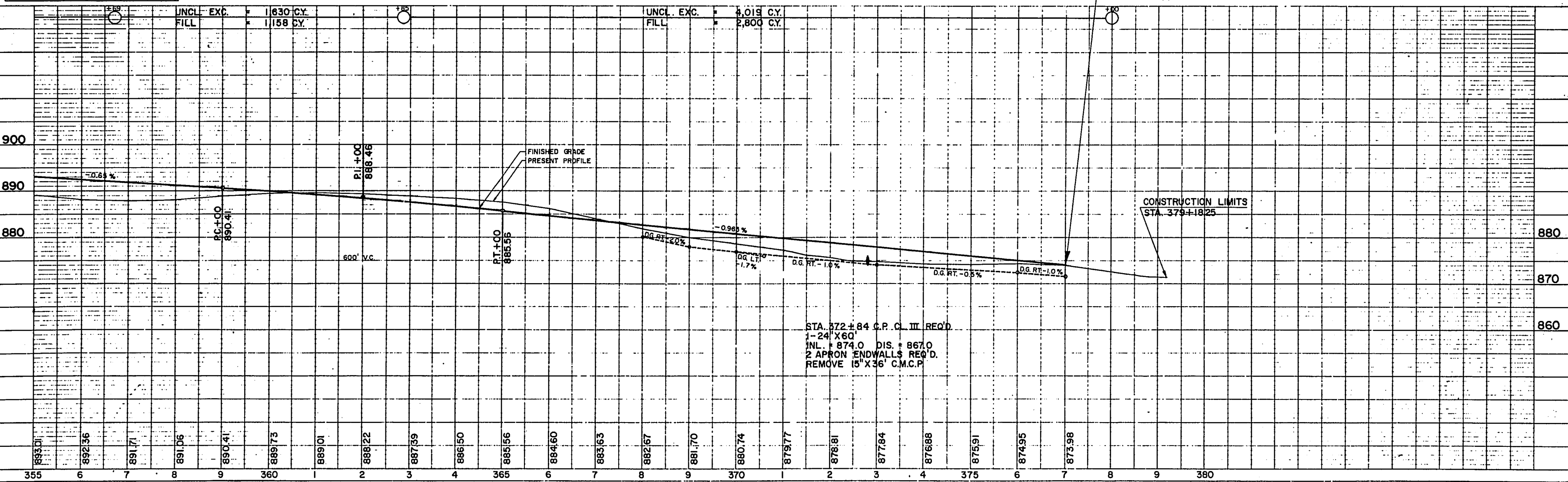
PROJECT ID	9108-1-71	SHEET NUMBER	12	TOTAL SHEETS	46
FEDERAL PROJECT DESIGNATION	S 0186 (1)				

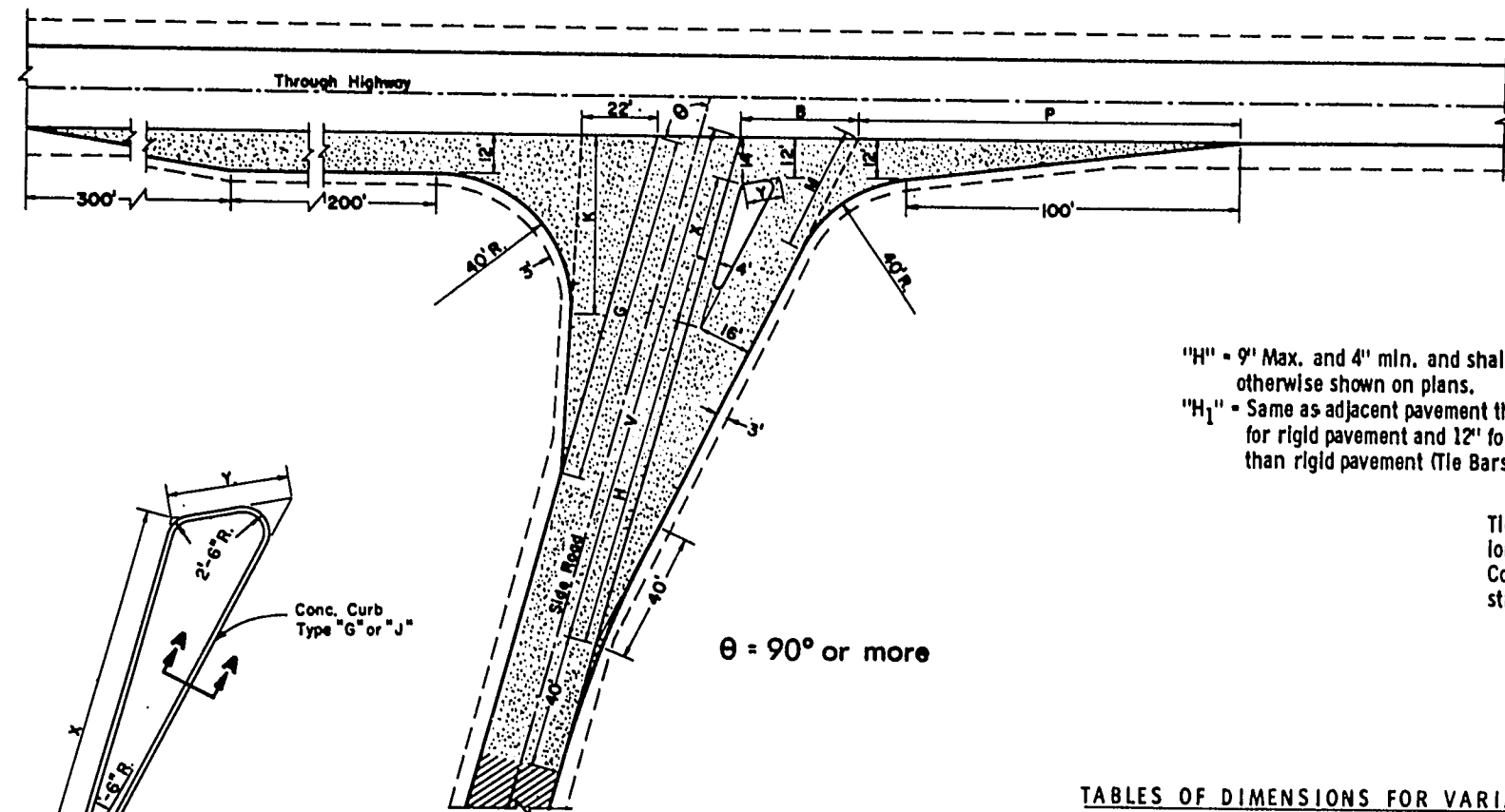
9108-1-72/SOI86(2) 5.8



NET LENGTH OF CENTERLINE		
STATION TO STATION	LIN. FT.	
355+00	377+00	2,200.00

CURVE NOTES	
P.I.	= 54+46.00
L	= 181°-39'-29"
Δ	= 1°-39'-29"
D	= 0°-15'
T	= 331.56'
L	= 663.60'
R	= 22,918.31'

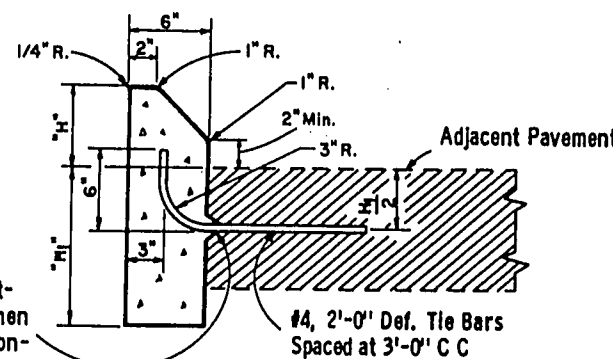




$\theta = 90^\circ$ or more

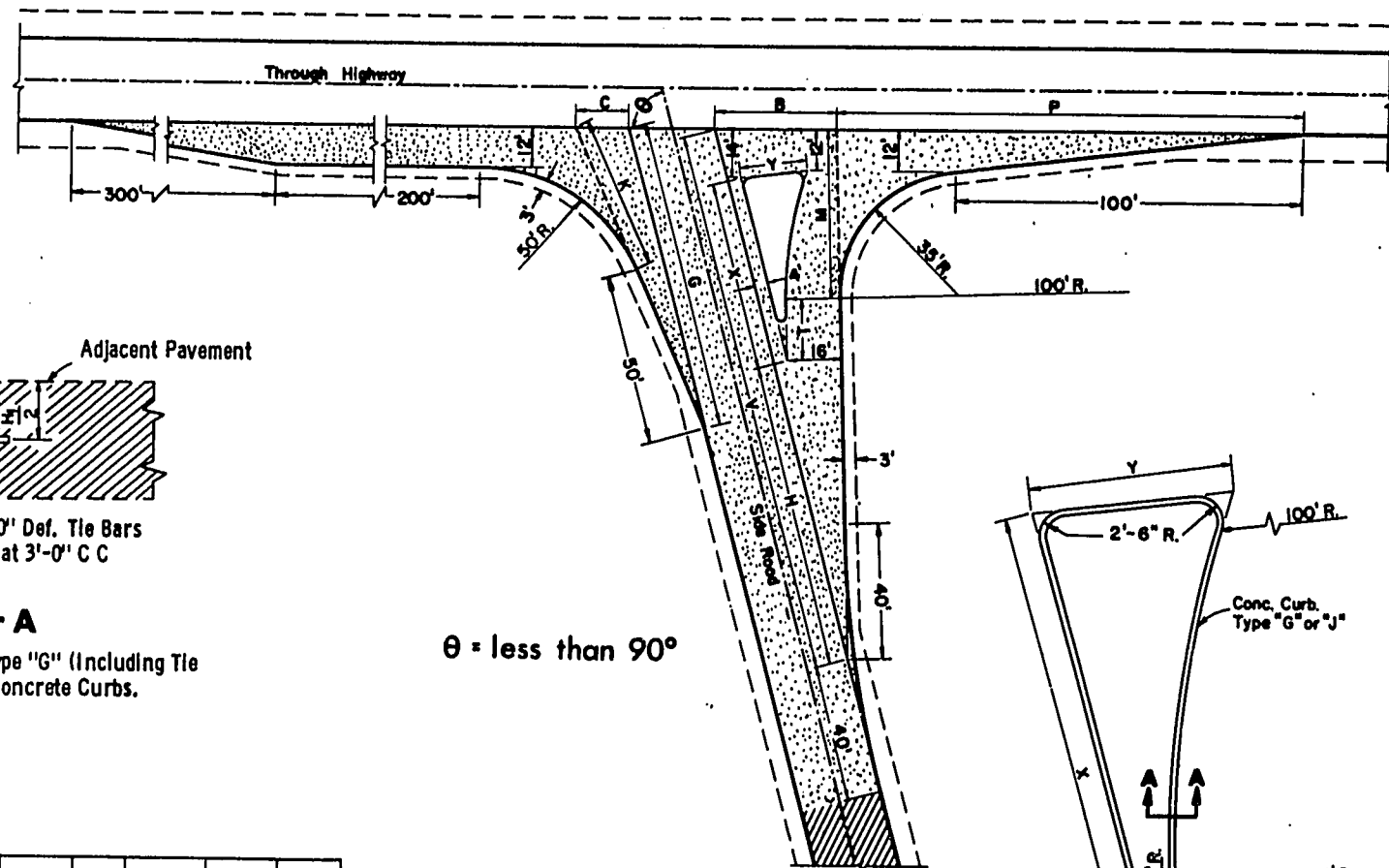
"H" = 9" Max. and 4" min. and shall be 6" unless otherwise shown on plans.
 "H₁" = Same as adjacent pavement thickness for rigid pavement and 12" for other than rigid pavement (Tie Bars Omitted).

Tie Bar recess positioned in reverse when Concrete Curb is constructed first



SECTION A-A

Note: To be measured and paid for as Type "G" (Including Tie Bars) or Type "J" (Excluding Tie Bars) Concrete Curbs.



$\theta = \text{less than } 90^\circ$

TABLES OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES
 (Values for Angles not shown shall be interpolated)

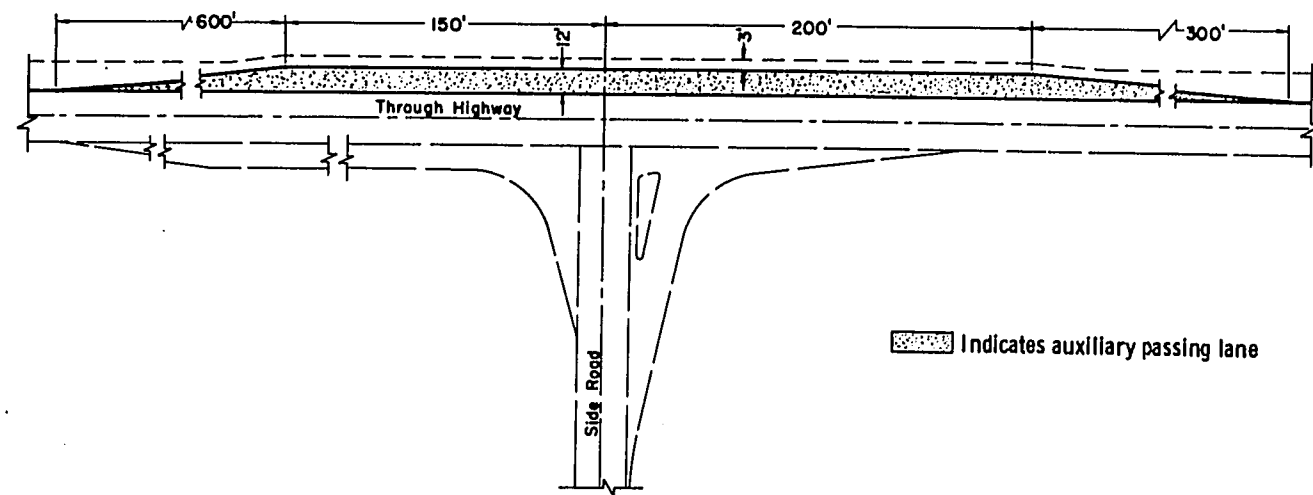
θ	G	K	B	V	H	X	Y	P	M
90	90	43.8	33.9	156.0	94	48.0	11.0	125.0	44.2
95	94	44.7	34.0	156.7	96	47.0	11.0	121.3	41.9
100	98	50.0	34.4	157.4	98	45.9	11.0	117.7	39.7
105	102	53.8	35.2	158.3	100	44.9	11.2	114.2	37.8
110	106	58.2	36.4	159.2	102	43.7	11.4	110.6	36.2
115	110	63.4	38.4	161.8	104	42.6	11.7	107.1	34.8
*120	114	69.4	40.1	161.2	106	41.4	12.2	103.4	33.7

*Maximum angle of Intersection

θ	C	G	K	B	V	X	Y	H	P	M	T
*60	19.7	76.3	38.6	41.5	169.9	67.4	29.3	84	144.5	58.8	21.6
65	17.8	82.6	40.6	39.4	166.9	63.6	25.0	86	141.2	54.9	20.7
70	15.8	87.2	43.1	37.4	164.1	59.7	21.9	88	136.8	51.4	19.2
75	15.7	90.9	45.6	35.7	161.4	55.9	19.3	90	132.7	48.2	17.4
80	15.9	94.9	48.3	34.4	158.9	51.9	17.0	92	128.8	45.3	14.9
85	16.2	99.3	51.4	33.4	156.4	48.0	15.0	94	125.2	42.7	10.4

*Desirable Minimum angle of Intersection

TYPE "A" SIDE ROAD INTERSECTION DETAILS



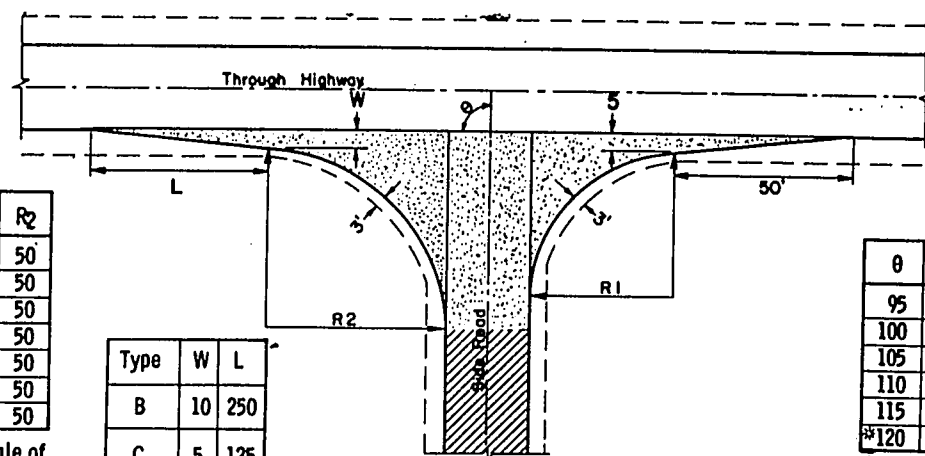
PASSING LANE DETAIL

Indicates auxiliary passing lane

θ	R ₁	R ₂
*60	40	50
65	40	50
70	40	50
75	40	50
80	40	50
85	40	50
90	40	50

*Min. Angle of Intersection

Type	W	L
B	10	250
C	5	125



TYPE "B" & "C" SIDE ROAD INTERSECTION DETAILS

θ	R ₁	R ₂
95	45	49
100	50	48
105	55	47
110	60	46
115	65	45
*120	70	44

*Max. Angle of Intersection

GENERAL NOTES

Designs may be used interchangeably in combination or separately for any one complete intersection depending upon intersection angle and surfacing of each approach roadway.

Details on this drawing are for minimum design only, and not applicable to special conditions, as shown elsewhere on the plans.

SIDE ROAD SURFACING NOTE

If the side road is not presently paved, pavement shall be placed to the limits shown. In the case where the construction limits are beyond the paving limits, gravel or crushed stone surfacing shall be placed between the paving limits and construction limits.

If the side road is presently paved, new pavement shall be placed to the limits of design as shown and beyond, if necessary, to meet existing pavement.

If side road is the construction project, the intersection surfacing shall be the same as for the project.

New Pavement
 Existing Surface

LAYOUT DETAILS FOR AT-GRADE SIDE ROAD INTERSECTIONS

State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:

8/9/67

DATE

APPROVED:

6/9/67

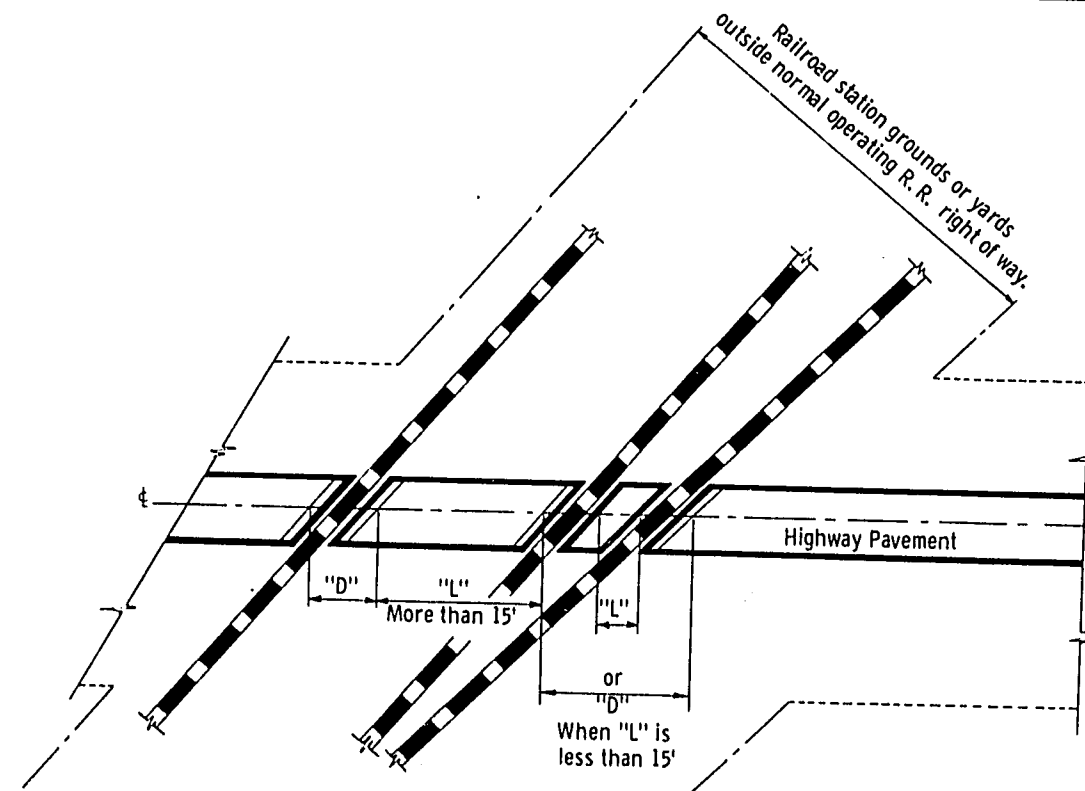
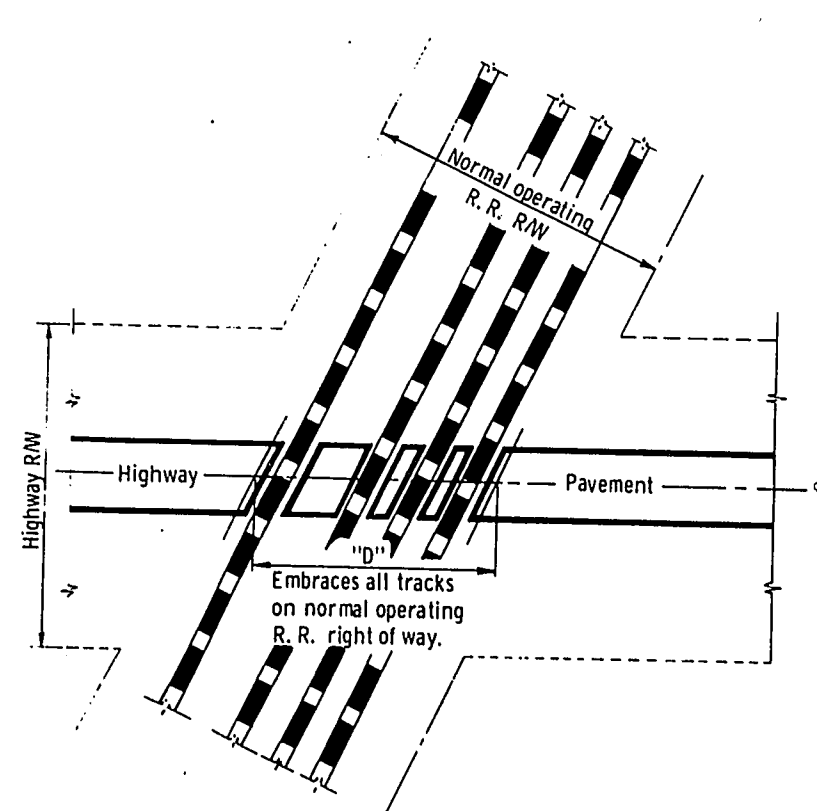
DATE

E. J. Rydell

CHIEF DESIGN ENGINEER

J. J. Burmeister

STATE HIGHWAY ENGINEER

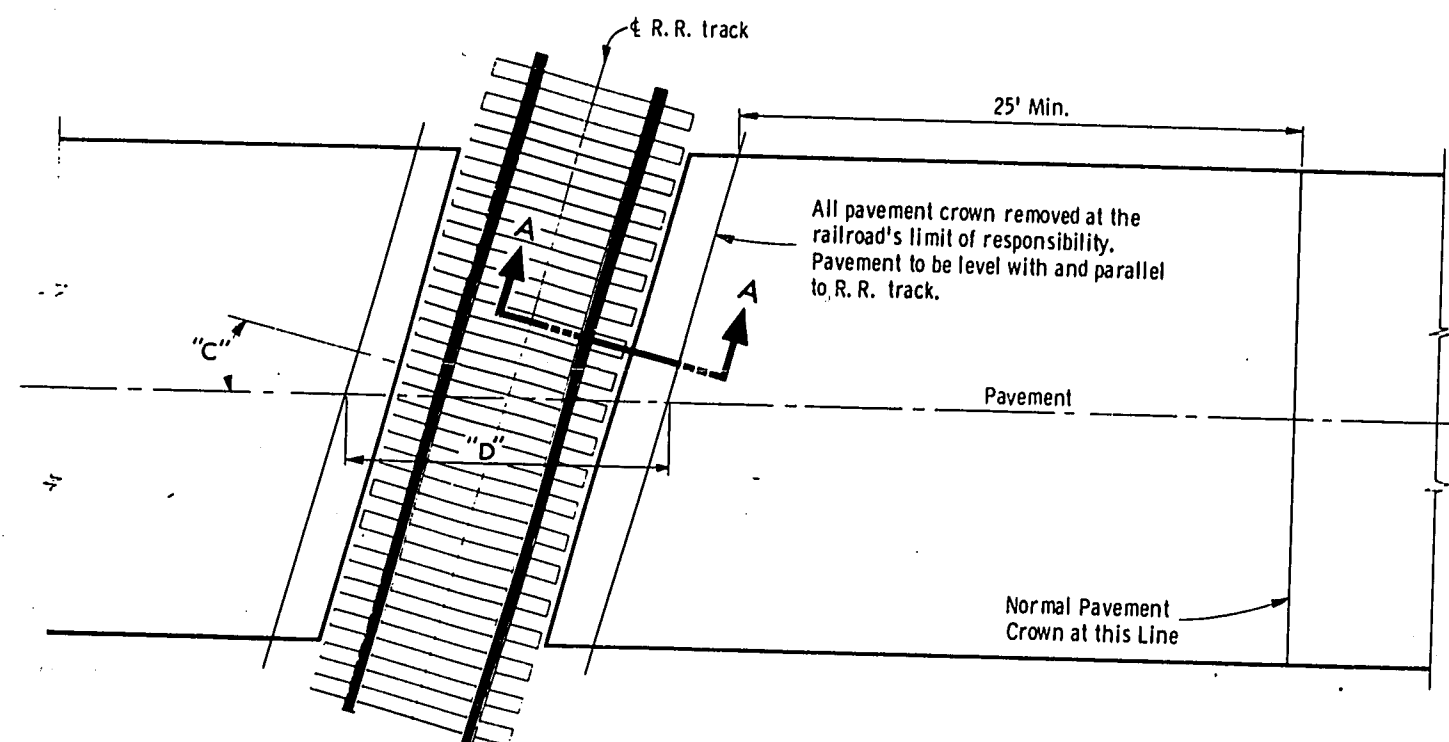


**TYPICAL TYPES OF RAILROAD GRADE CROSSINGS
SHOWING THE RAILROAD'S LIMIT OF RESPONSIBILITY
AND MEASUREMENT DETAILS**

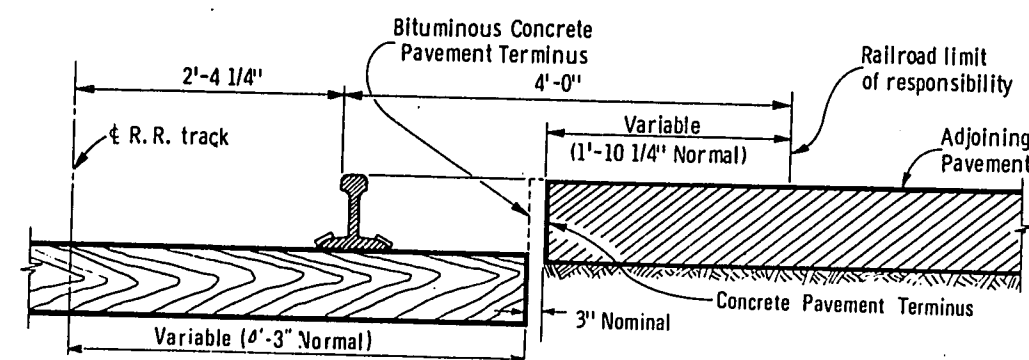
GENERAL NOTES

Details of construction, materials, and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

"D" - Exception to net length of ϵ . Paving or surfacing and shoulder material within limits designated by "D" to be at expense of railroad company. Trackage to industrial sites to be treated same as for trackage to R.R. station grounds or yards outside of normal operating R/W.



NOTE: $D = \frac{12.71}{\cos. "C"}$



SECTION 'A-A'

**RAILROAD APPROACH
CONSTRUCTION DETAILS**

**PAVEMENT DETAILS
FOR RAILROAD APPROACH**

State of Wisconsin
Department of Transportation
Division of Highways

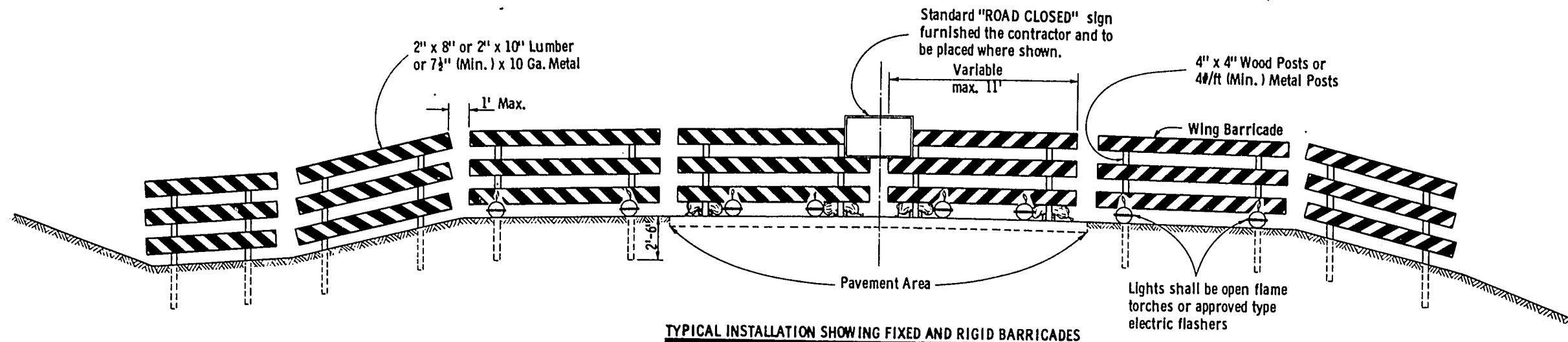
RECOMMENDED FOR APPROVAL

3/13/69
DATE

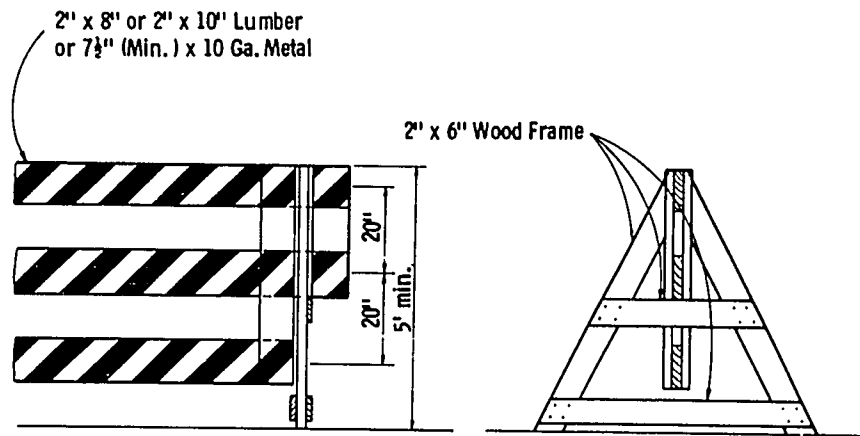
APPROVED
3/27/69
DATE

E. J. Rybak
CHIEF DESIGN ENGINEER

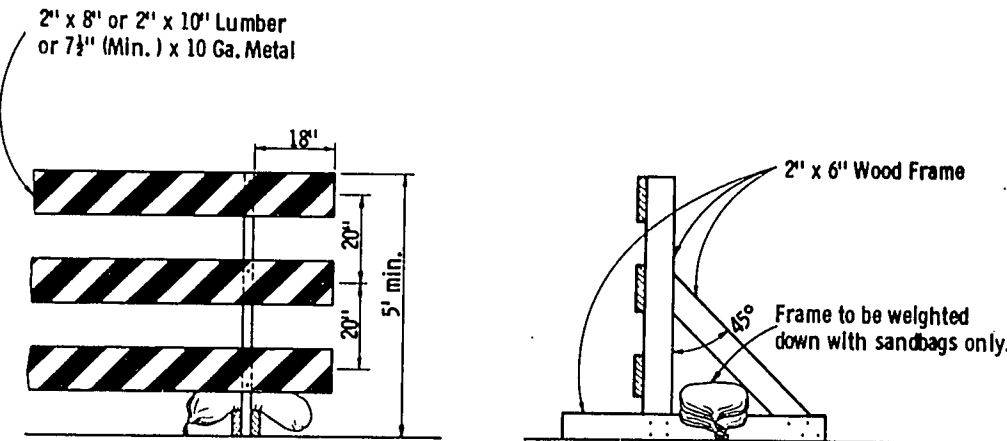
A. J. Sumner
STATE HIGHWAY ENGINEER



TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES

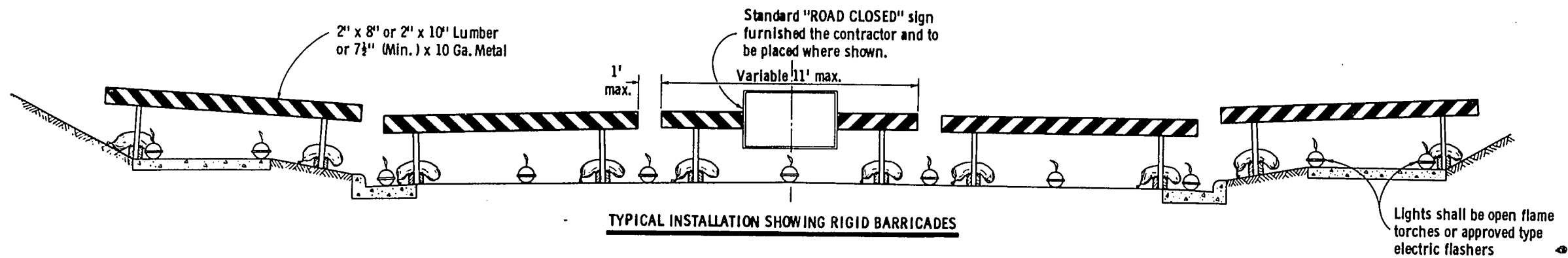


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

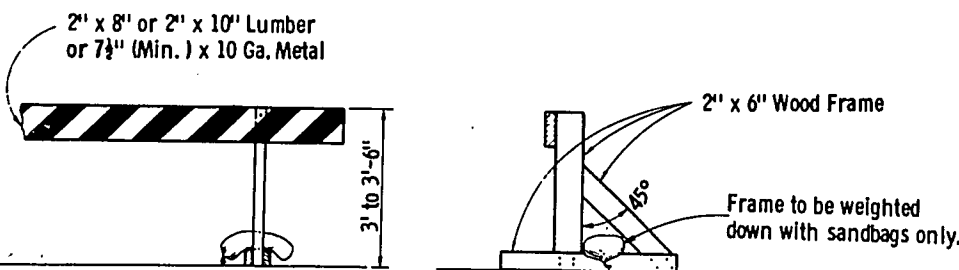


ALTERNATE TYPE INSTALLATION (RIGID)

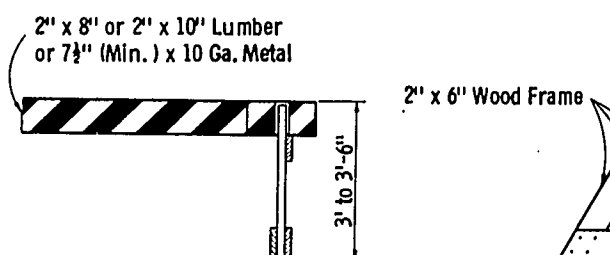
CLASS I BARRICADES



TYPICAL INSTALLATION SHOWING RIGID BARRICADES

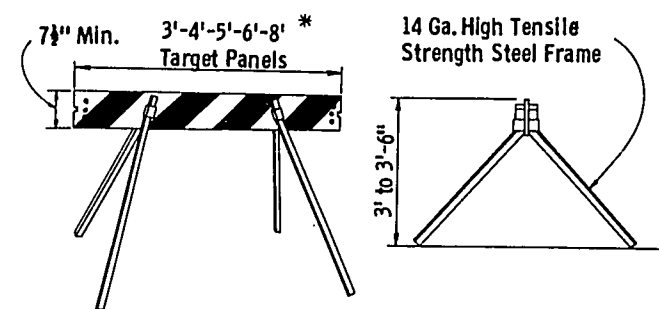


ALTERNATE TYPE INSTALLATION (RIGID)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADES



* Maximum length of combination panels 16'

ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

GENERAL NOTES

The contractor shall construct, place and maintain barricades as shown on the drawing and as required by the Standard Specifications or applicable Special Provisions.

CLASS 1 BARRICADE:

Class 1 Barricades shall be of variable length as indicated, and long barricades shall be assembled from these units. The Class 1 Barricade is the type normally required for major operations, where the barricade will remain in place for extended periods. Class 1 Barricades shall be used at points where the road is closed to traffic. Gates or movable sections of a barricade shall be provided when necessary, for access of equipment or other authorized vehicles.

Wing Barricades are Class 1 Barricades erected on the shoulder on one or both sides of the pavement to give Traffic the perceptive effect of a narrowing or restricted roadway. The ends closest to traffic of all three members of a wing barricade shall be in a vertical line. If used in a series, they should start at the outer edge of the shoulder and be brought progressively closer to the pavement. Wing Barricades may be used as a mounting for the advance warning or guide signs or for flashers. When used on two-way roadways, the back of the wing barricade shall be painted reflectorized white.

CLASS 11 BARRICADE:

Class 11 Barricades may be used only where the hazard to traffic is relatively small, and for the more or less continuous delimiting of a restricted roadway, or for temporary daytime use.

MATERIAL & FABRICATION:

Lumber shall be of a grade structurally sound and sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.

Metal shall be sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.

The fabrication of the barricade shall be in accord with good pertinent woodworking and metalworking practices.

All lumber or timber dimensions stated are nominal.

PAINTING:

All barricades shall be painted in alternate 4" or 6" black and white stripes at a 45° angle. The width of stripe shall be consistent for each complete barricade installation. Black stripes shall be painted with weather resistant and durable black paint. White stripes shall be primed, followed by two coats of white reflectorized paint or reflective wide angle sheeting.

DIRECTION OF DIAGONAL STRIPES:

Where a barricade extends entirely across the roadway with no vehicle access provision, the stripes shall slope downward toward the highway centerline.

Where vehicle access is permitted, the stripes shall slope downward in the direction toward which vehicles must turn in detouring.

Where both right and left turns are provided for, the stripes shall slope downward in both directions from the center.

The stripes on wing barricades shall point downward toward the roadway.

LIGHTING:

Lighting devices for barricades shall conform to the requirements of the Standard Specifications.

MEASUREMENT & PAYMENT:

All barricades, unless otherwise provided for in the plans and/or special provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.

Alternate black & white stripes. See General Notes for direction of stripes

4" or 6" but constant for each barricade installation

TYPICAL DIAGONAL STRIPES

Applies to all Classes & Types of Barricades

CONSTRUCTION BARRICADE

State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:

DATE 1/1/67

APPROVED: 1/13/67

DATE

DESIGN ENGINEER

STATE HIGHWAY ENGINEER