

Highland Colony PARKWAY

~~SUMMERTREE~~ PARKWAY

804

Roadway Construction and Drainage Plans

3-1

CITY OF RIDGELAND, MISSISSIPPI

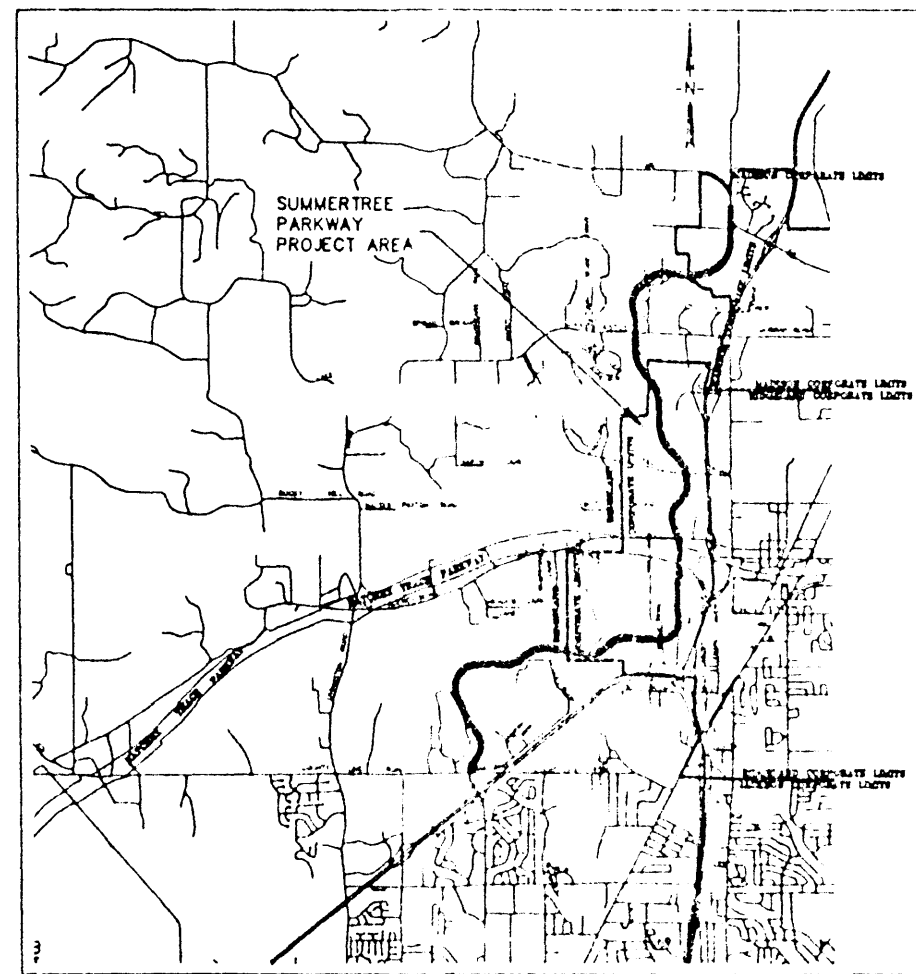
Mayor: Gene F. McGee

Aldermen: Brian Barcellona
Al Bible
Harvey Carr, Jr.
Linda Davis
Daryl Smith

City Attorney: Jerry Mills

Acting City Clerk: Becky Dixon

Acting Public Works Director:
Sid Hawthorne



VICINITY MAP

November, 1989

WAGGONER ENGINEERING, INC.
Consulting Engineers
Jackson, Mississippi

MADISON COUNTY BOARD OF SUPERVISORS:

President:
J. S. "Brother" Harris

District #1:
Bob Dowdle

District #2:
J. S. "Brother" Harris

District #3:
David Richardson

District #4:
Karl Banks

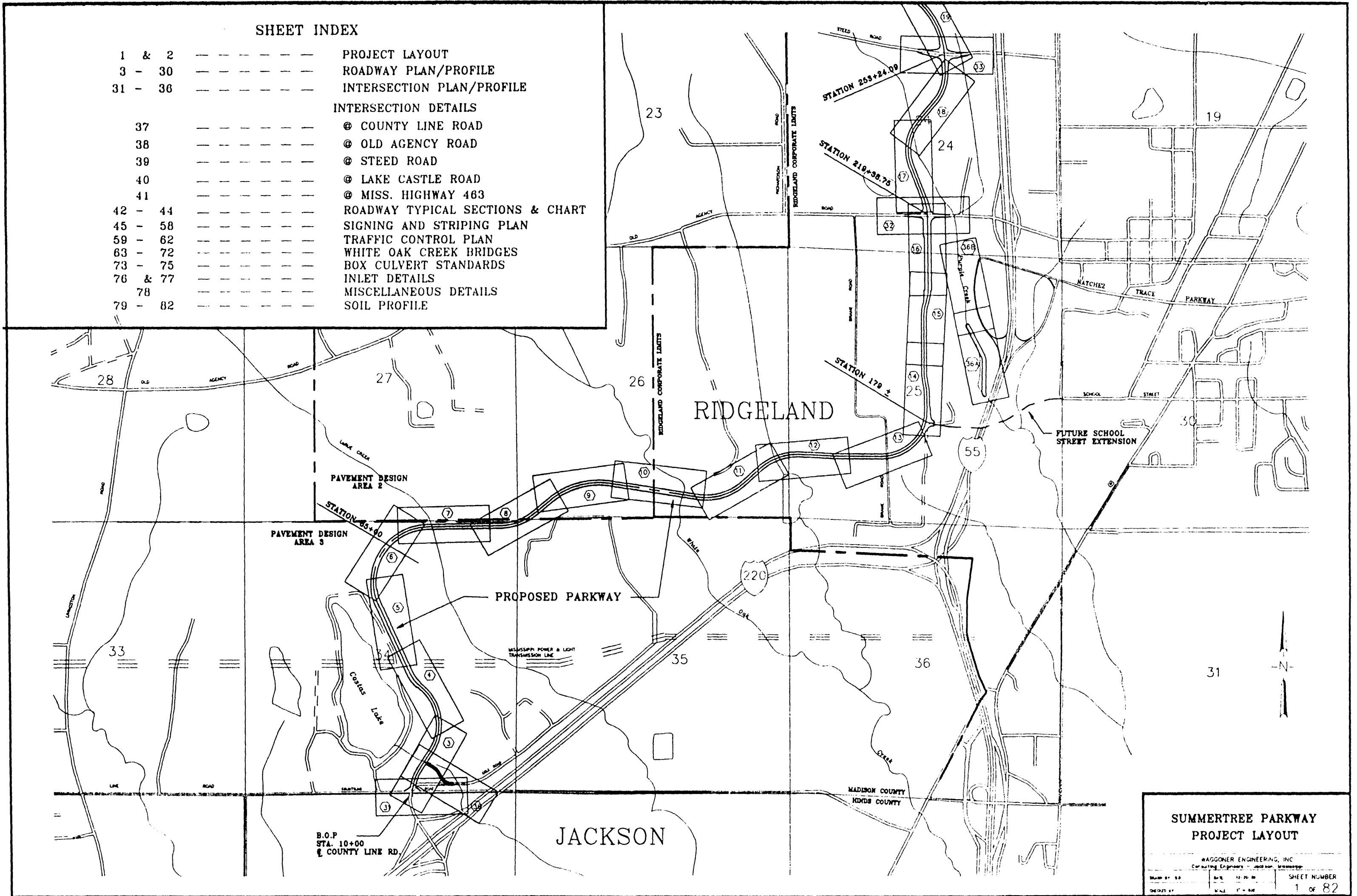
District #5:
J. L. McCullough

County Attorney: Bob Montgomery

PWP-00804
SAM VINSON

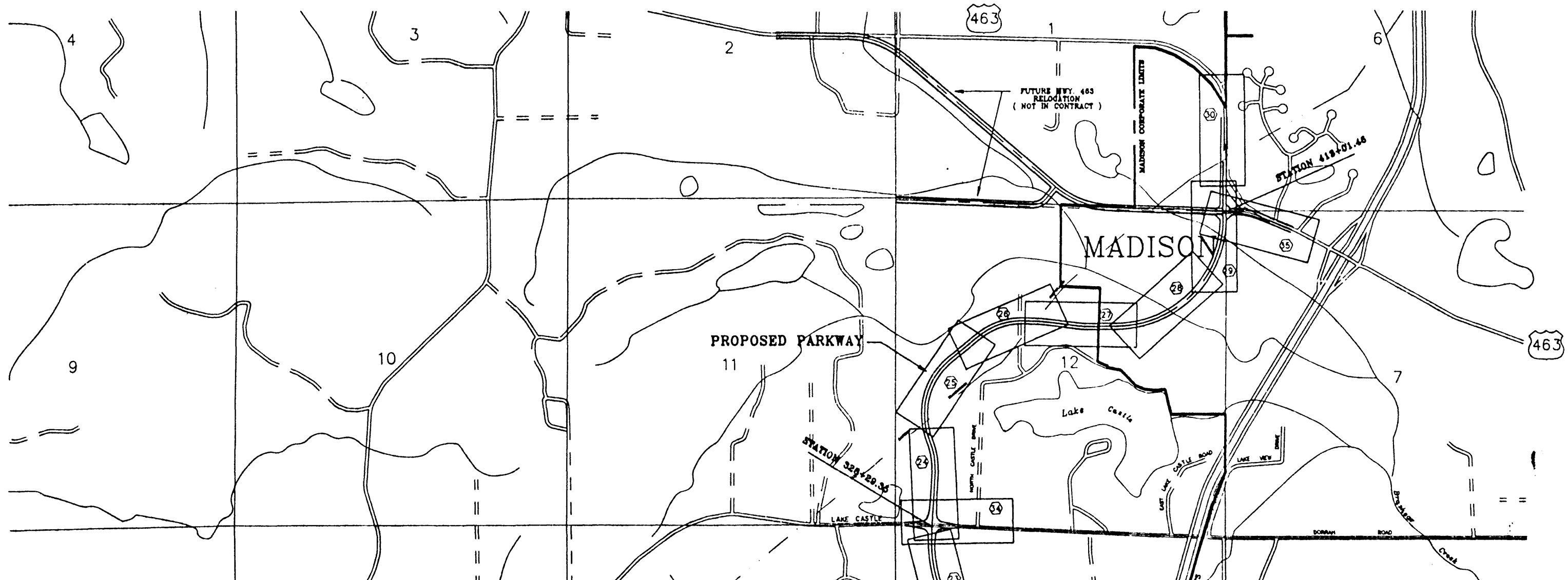
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38	---	@ OLD AGENCY ROAD
39	---	@ STEED ROAD
40	---	@ LAKE CASTLE ROAD
41	---	@ MISS. HIGHWAY 463
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**SUMMERTREE PARKWAY
PROJECT LAYOUT**

WAGGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Mississippi
 DRAWN BY: [] DATE: 12-26-81 SHEET NUMBER: 1 of 82
 CHECKED BY: [] SCALE: 1" = 50'



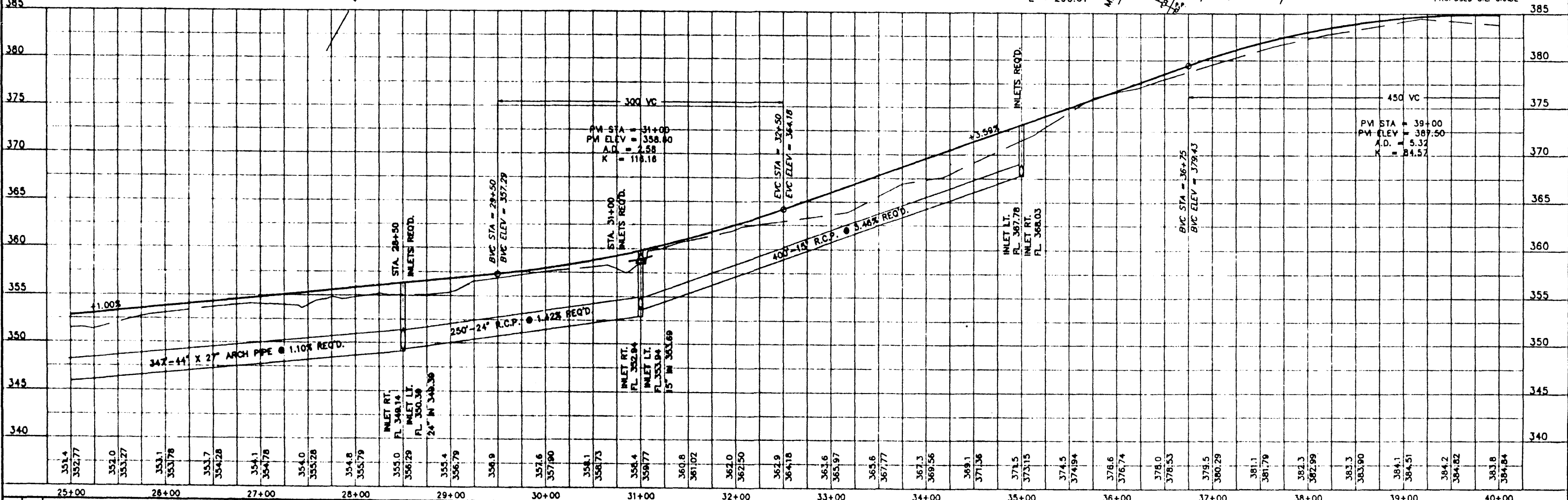
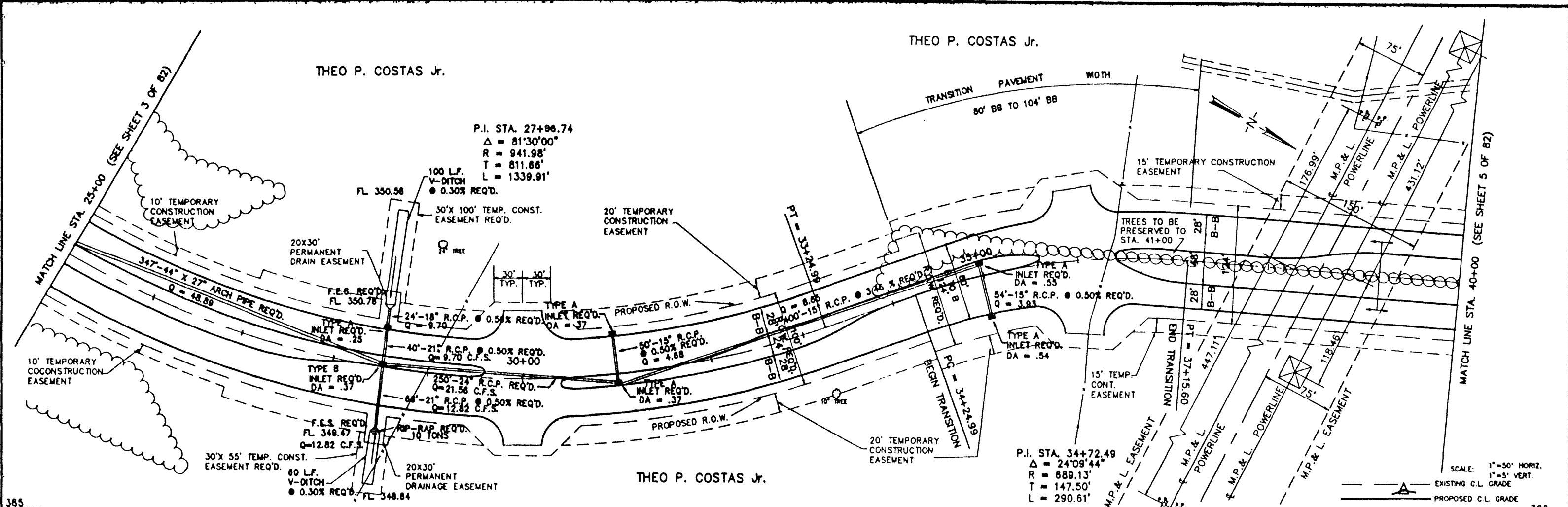
GENERAL CONSTRUCTION NOTES

1. The existing utility locations shown on plans are approximate only. The Contractor shall coordinate the location (horizontal and vertical) of the existing utilities (power, telephone, gas, water, sewer, etc.) with the appropriate utility company before construction begins.
2. Any utility line or service line encountered during construction, whether shown on plans or not, shall be protected by the Contractor and any repairs necessary due to damage to same shall be the responsibility of the Contractor, at no additional cost to owner.
3. The Contractor shall be responsible for verifying horizontal and vertical clearances on all utility crossings before installation.
4. The Contractor shall fertilize and seed all areas where the existing vegetation was removed or disturbed during construction and not required to be sold seeded.
5. Unsuitable bedding, backfill or roadway subgrade material which may be encountered shall be excavated to the limits required and backfill with acceptable material to the Mass and grades shown on plans. Undercut material shall be processed and used under medias and side slopes.
6. Sanitary and storm sewer roach lengths may be varied in construction of project to conform to normal joint lengths.
7. The Contractor shall maintain local traffic to all residences and businesses fronting along the project for the duration of the work.
8. All existing storm sewer pipe within the construction limits shall be removed and replaced by the Contractor as directed.
9. All existing sanitary manholes within the construction limits shall be adjusted to finished grade by Contractor. Any manhole casting salvaged shall be the property of the Owner.
10. Any TBM's which are or may be in conflict with construction activities shall be relocated by Engineer prior to commencement of construction in the immediate area.
11. All detailed construction staking will be by Contractor at no cost to the Owner.
12. All sanitary sewer manhole castings and storm manhole castings shall be traffic duty type unless noted otherwise.
13. All private utilities will be relocated or adjusted by the affected company to eliminate any conflict with the proposed improvements at no cost to the Contractor.
14. The Contractor shall be responsible for completing all sampling and testing of materials, and for submission of same to Engineer prior to their use. This shall include select backfill, concrete, asphalt, aggregate and other items as specified by the Engineer. Such prior use testing shall be an absorbed item.
15. The Contractor shall obtain and furnish to the Engineer copies of manufacturers certifications for all water pipe, sewer piping, storm culverts, castings, specials and man. Such certification shall state that the subject material meets the specified quality, grade, parity, class or weight, or that the subject material meets or exceeds the requirement of the applicable ASTM, AASHTO, MHD or other standards. Certifications shall be submitted to the Engineer prior to incorporation of the subject material into the project.
16. The Contractor shall verify the invert elevations of existing storm drains and sanitary sewer mains to be adjusted or incorporated into the work prior to initiation of construction on any new lines connecting thereto. Any variations from plan grades shall be reported to the Engineer.
17. Cut slopes for storm and sanitary sewer, where shown, will be measured from the original ground profile or proposed centerline, whichever is less.
18. The Contractor shall repair any existing fence damaged, removed or disturbed during construction. The fence shall be restored to its original condition or better. Fences in new ROW to be removed and replaced along ROW or 2' as req'd. Any fence repair shall be absorbed cost.
19. Top of curb elevations every 50' will be provided to the successful bidder by the Engineer prior to commencement of construction.
20. Contractor is to preserve existing trees where possible.
21. Utility contract(s) for all or some of the proposed utilities shown on the plans may be let during the construction period of this contract. Contractor is to coordinate his activities with other Contractors to minimize conflict.

SUMMERTREE PARKWAY PROJECT LAYOUT		
WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi		
DATE: 7-22-82	SCALE: AS SHOWN	SHEET NUMBER: 2 of 82

THEO P. COSTAS Jr.

THEO P. COSTAS Jr.



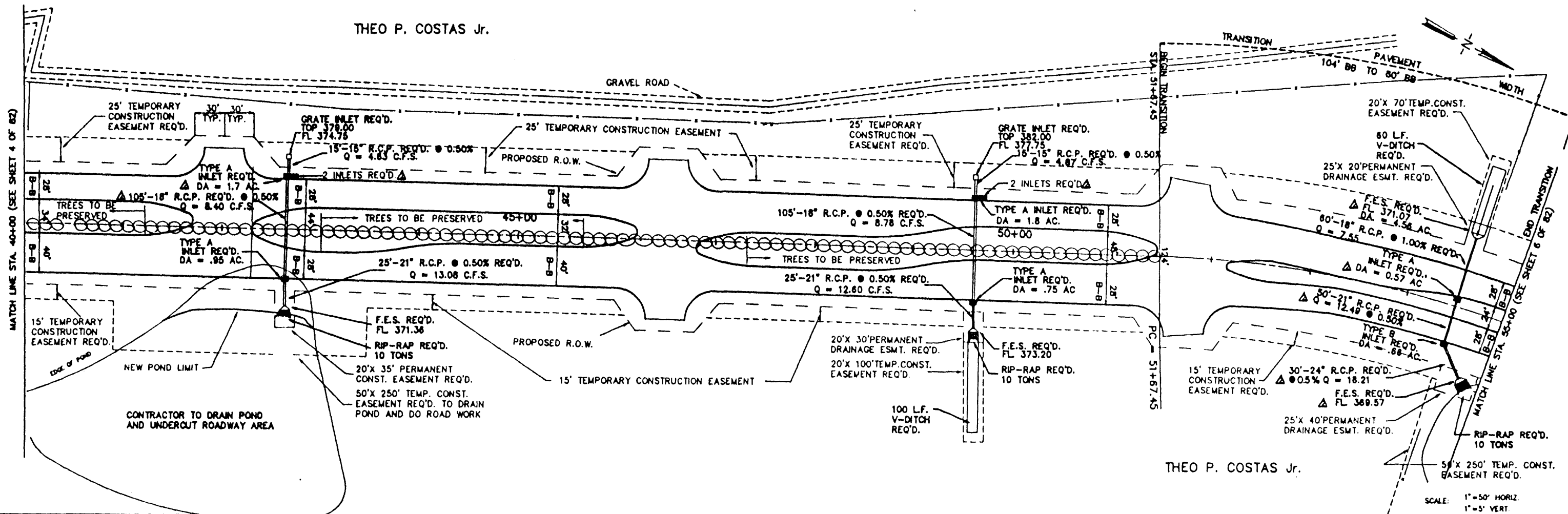
2	4-03	CHECKED CUP: S & P.I. STA.	DESIGNED	DATE	11-28-88
1	2-21	FINAL REVISIONS	DRAWN	SCALE	AS SHOWN
NO.	DATE	REVISIONS	BY		

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

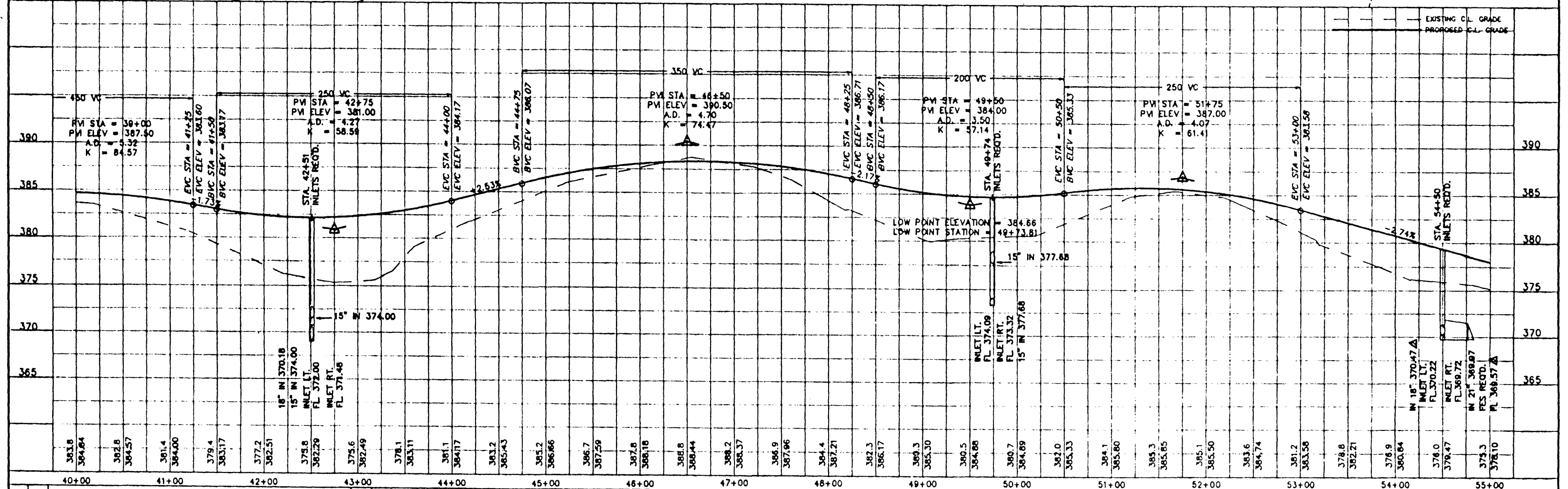
ACAD PATH ROUTE
G:\DWG\SUMTREE\PROJ2
W.E.L. JOB NO. 88-103 SHEET NO. 4 OF 82

THEO P. COSTAS Jr.

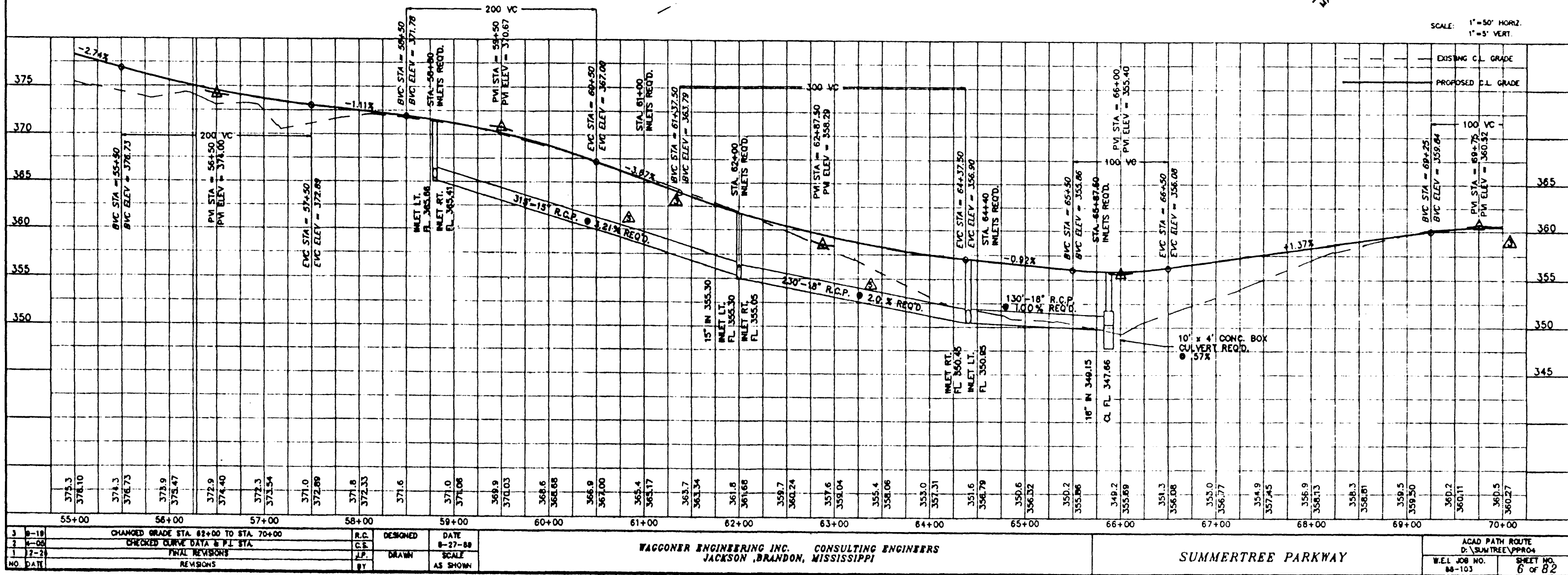
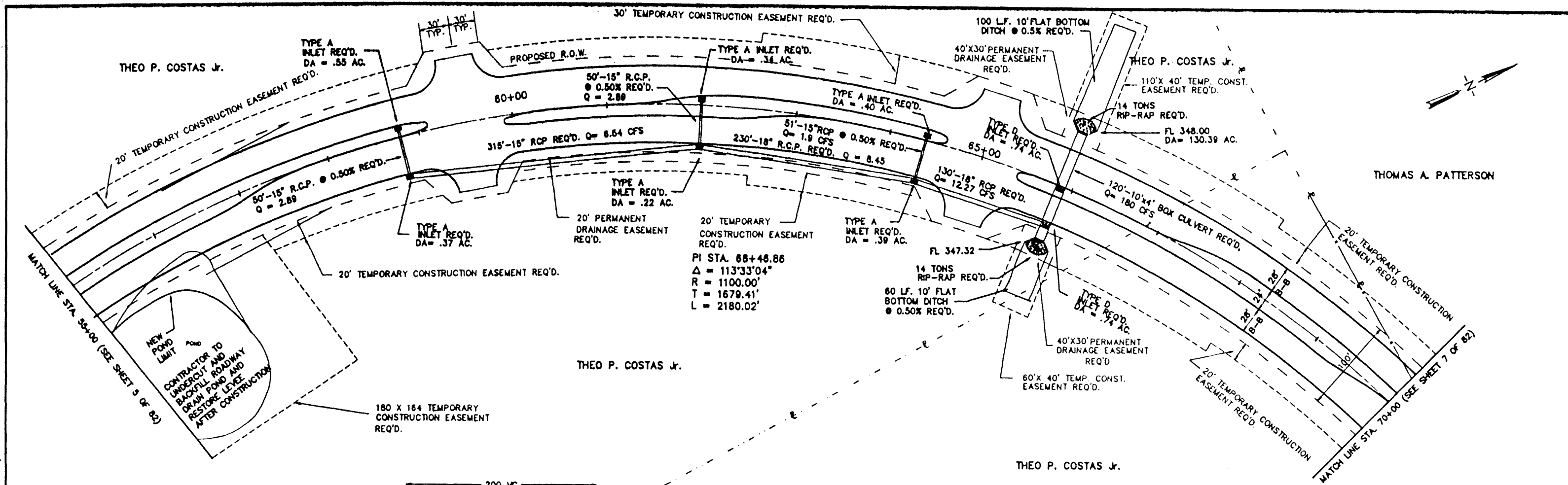


THEO P. COSTAS Jr.

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.



NO.	DATE	REVISIONS	DESIGNED	DATE	WAGGNER ENGINEERING INC. CONSULTING ENGINEERS		SUMMERTREE PARKWAY		ACAD PATH ROUTE
1	12-29	FINAL REVISIONS	J.P.	11-28-89	JACKSON / BRANDON, MISSISSIPPI				G. W. W. SUMMERTREE PROJ.
			BY	SCALE	AS SHOWN				W.E.I. JOB NO. 88-103
									SHEET NO. 5 OF 82

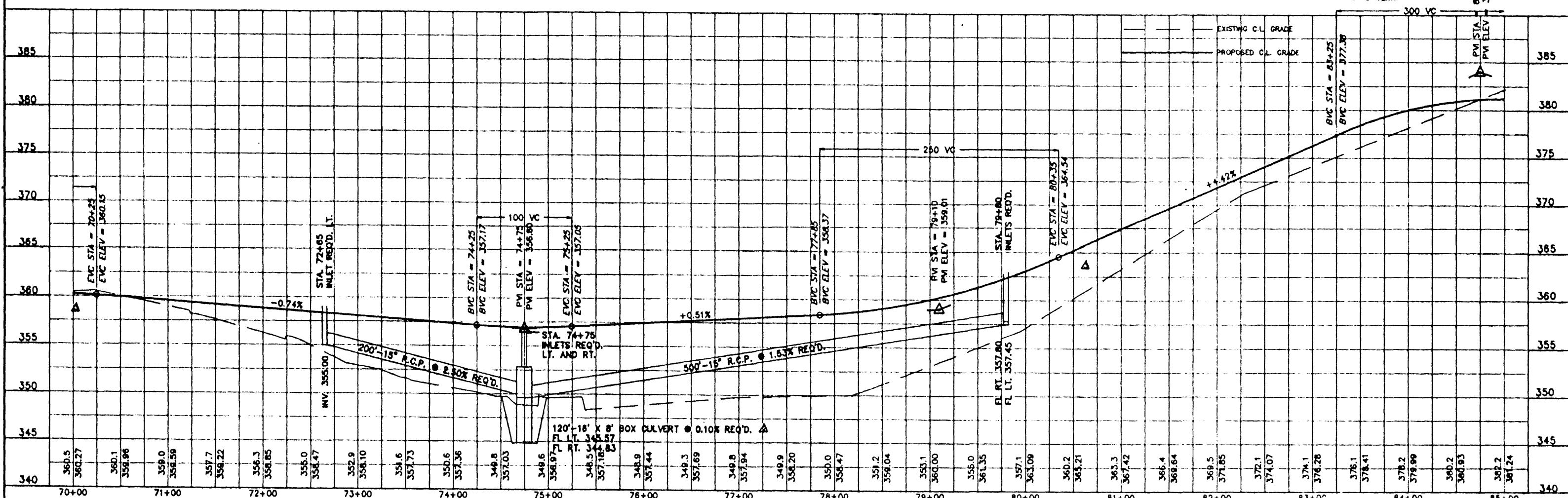
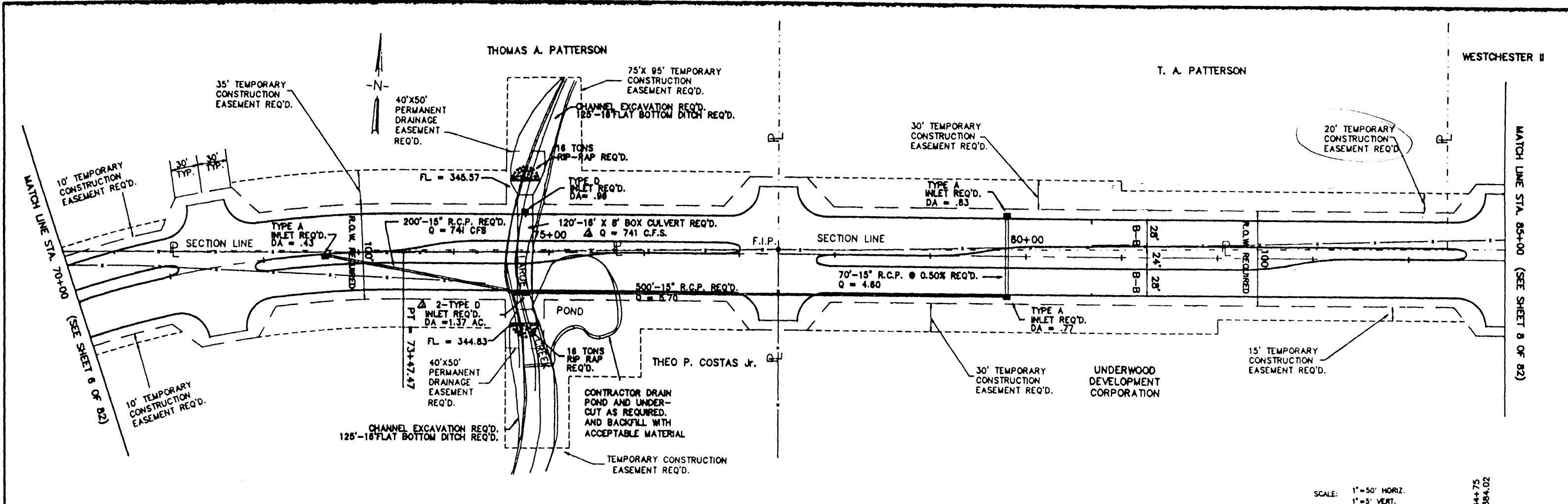


3	8-18	CHANGED GRADE STA. 62+00 TO STA. 70+00	R.C.	DESIGNED	DATE	8-27-88
2	8-08	CHECKED CURVE DATA & P.I. STA.	C.E.	DRAWN	SCALE	AS SHOWN
1	7-27	FINAL REVISIONS				
NO.	DATE	REVISIONS	BY			

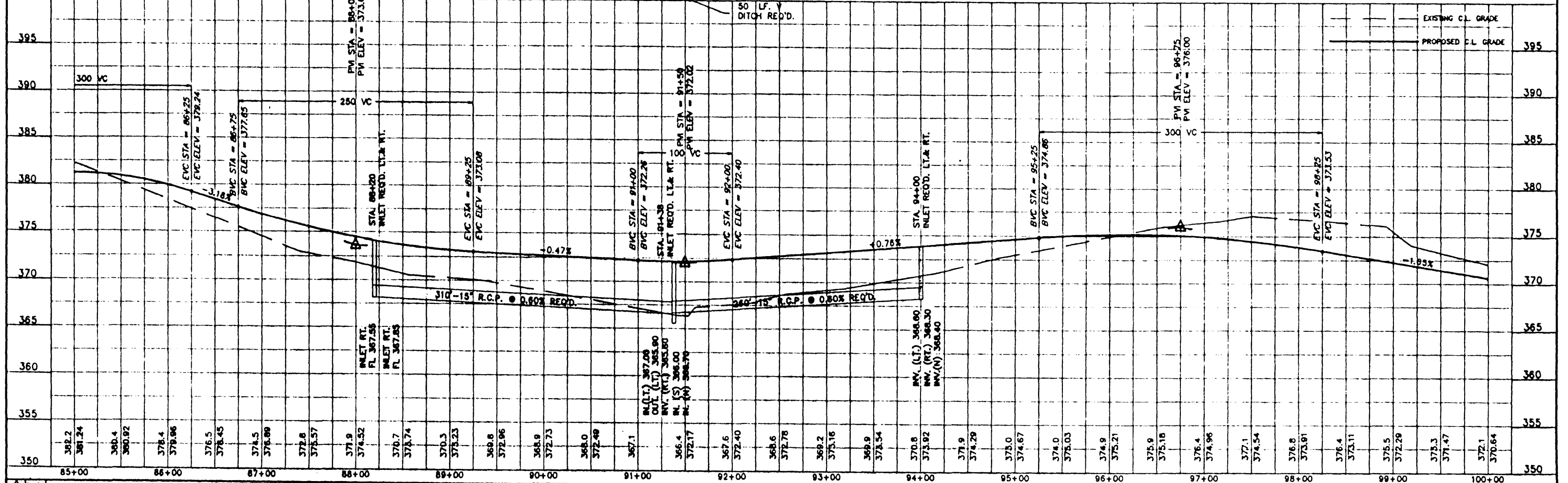
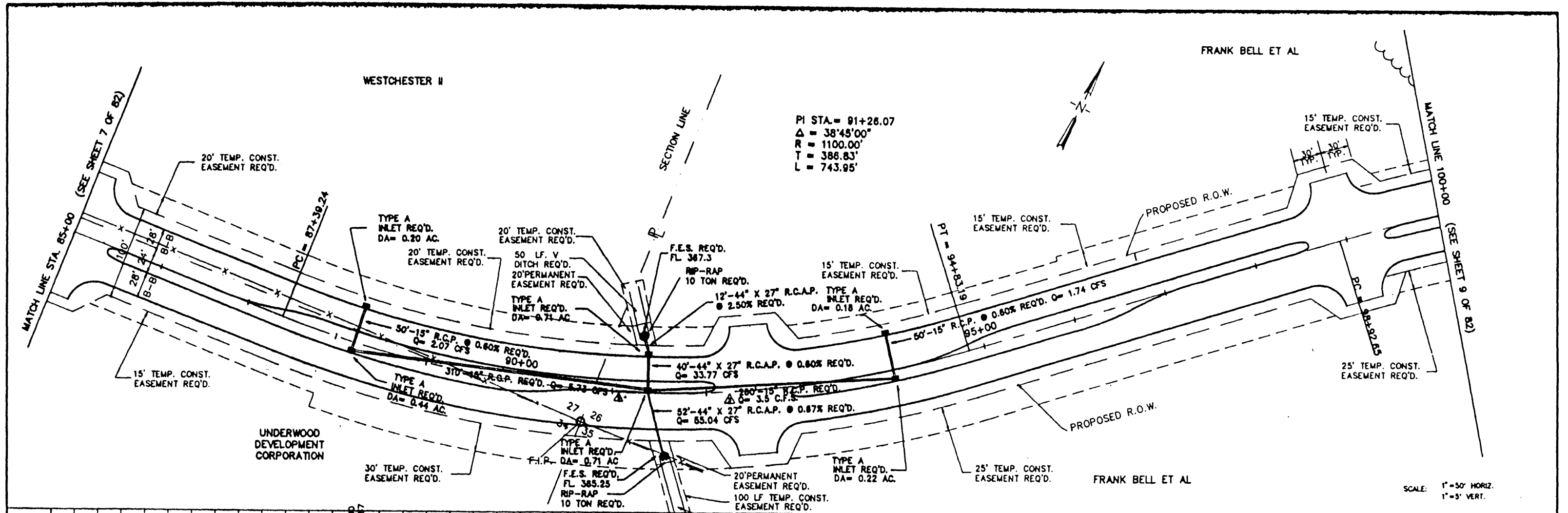
WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON, BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACAD PATH ROUTE D:\SUMTREE\PPRO4
W.E.L. JOB NO. 88-103
SHEET NO. 6 of 82



NO.	DATE	REVISIONS	BY
1	12-11	FINAL REVISIONS	J.P.
2	1-11	CONST. REVISIONS	K.L.
3	2-11	CHANGED GRADE STA. 70+00 TO STA. 81+00	R.C.



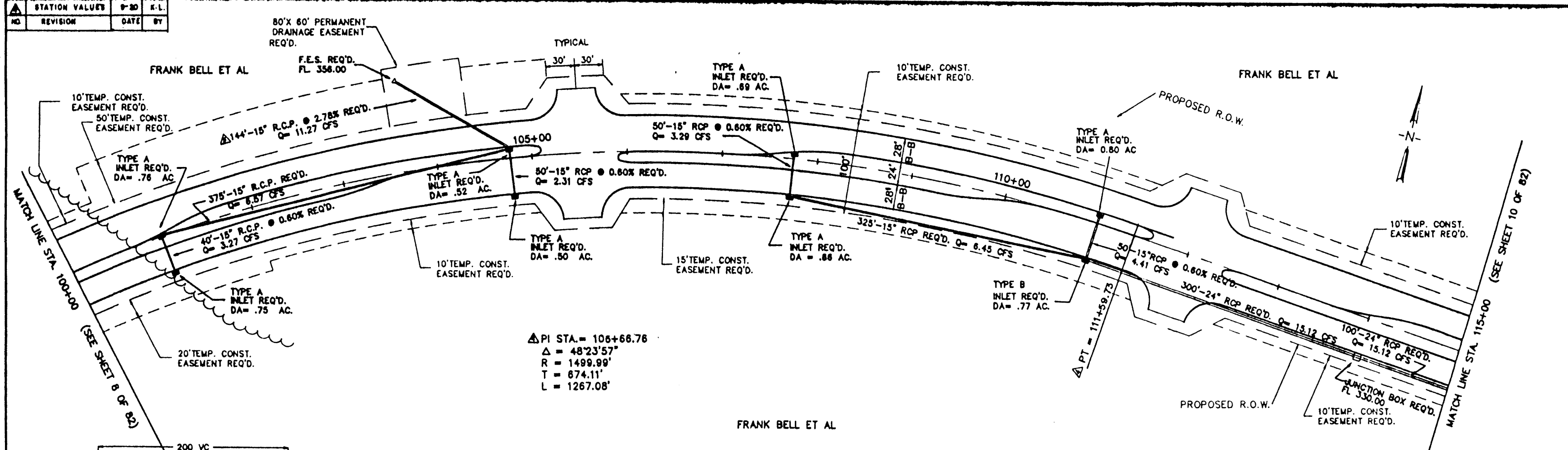
NO.	DATE	REVISIONS	BY
1	12-11	FINAL REVISIONS	
2	4-08	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	
3	5-08	CONST. REVISIONS	

DESIGNED	DATE
DRAWN	8-27-98
SCALE	
AS SHOWN	

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

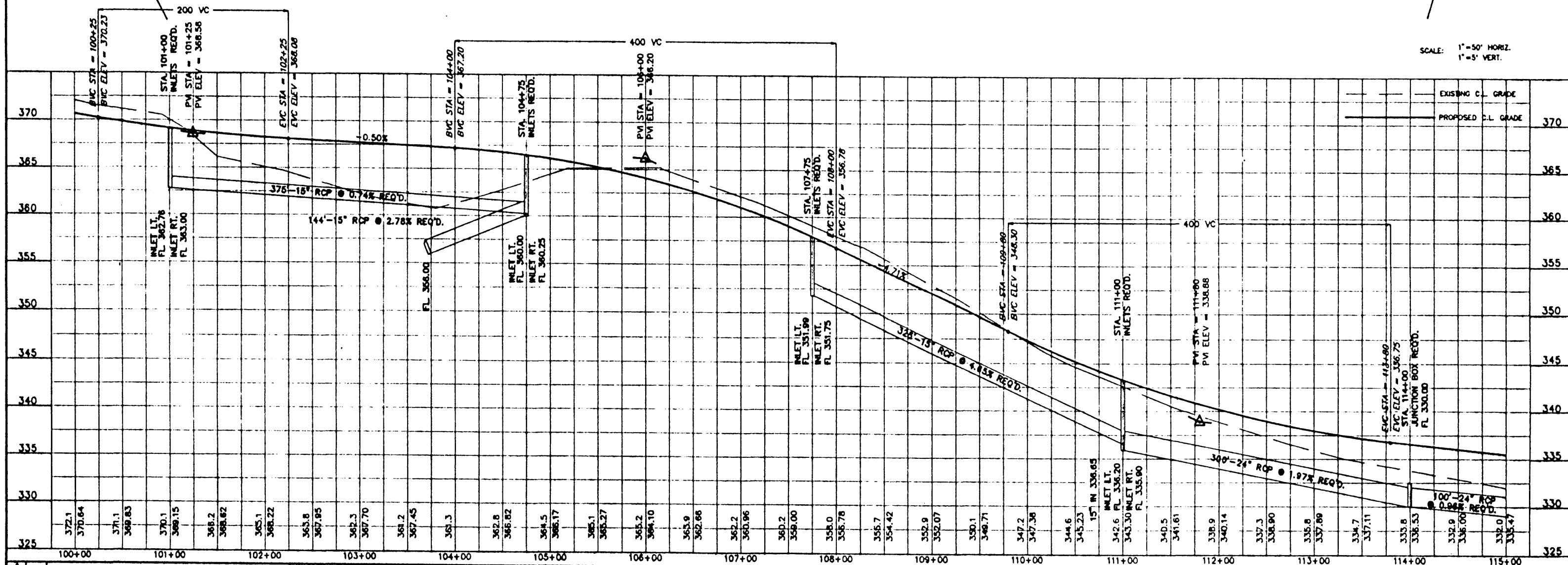
SUMMERTREE PARKWAY	
ACAD PATH ROUTE C:\DWG\SUMMERTREE\PROJ8	SHEET NO. 8 of 82
W.E.L. JOB NO. 88-103	

STATION VALUES	P-30	K.L.
NO	REVISION	DATE BY



Δ PI STA. = 106+66.76
 Δ = 48'23'57"
R = 1499.99'
T = 674.11'
L = 1267.08'

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

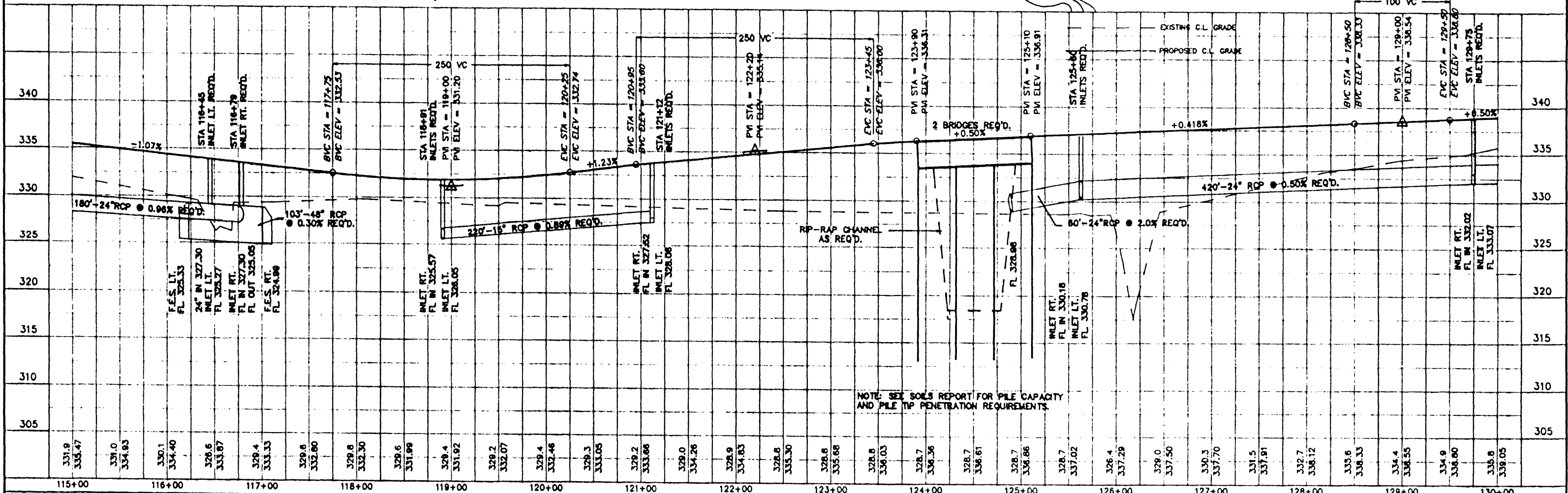
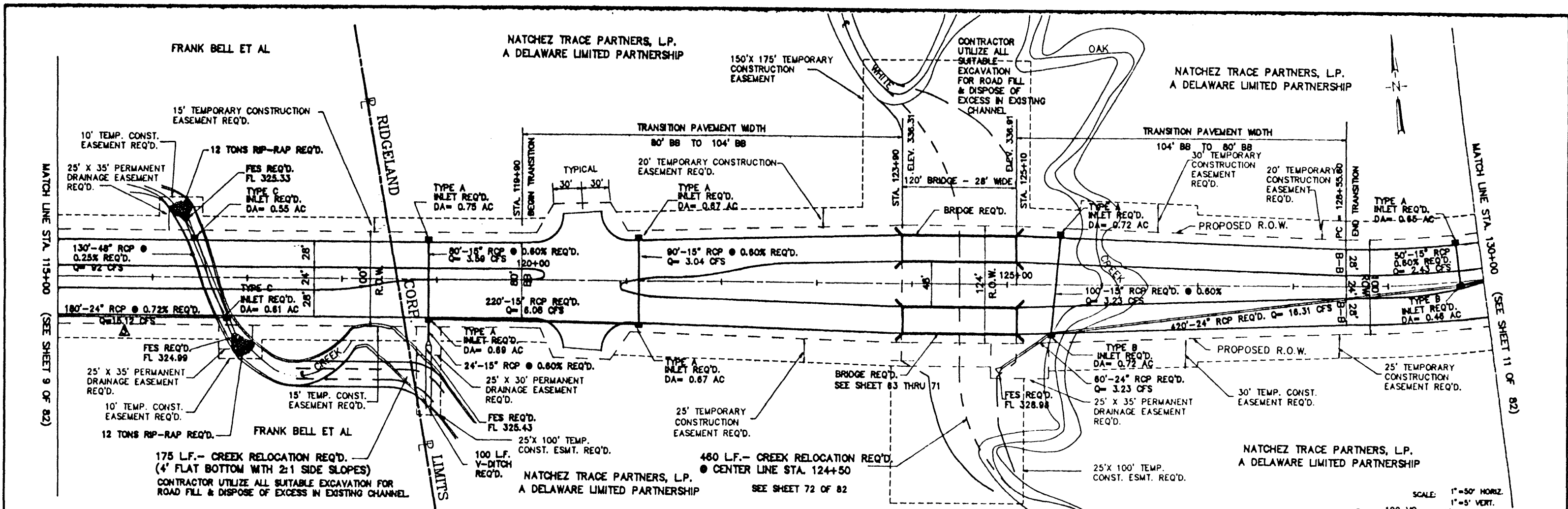


NO.	DATE	REVISIONS	DESIGNED	DATE	SCALE
1	2-11	FINAL REVISIONS	K.F.	8-27-89	AS SHOWN
2	4-08	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	C.S.		
3	8-08	CONST. REVISION	K.F.		

WACONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACAD PATH ROUTE	SHEET NO.
Q:\SUMTREV\PROJ	9 of 82
WEL JOB NO.	
88-103	



NO.	DATE	REVISIONS	BY
3	8-18	ADDED 9' @ 116+00, REVISED GRADE & ADDED VERTICAL CURVE	M.L.
2	4-08	CHECKED PROPERTY OWNERS	C.S.
1	2-11	FINAL REVISION	L.P.

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACAD PATH ROUTE
C. DRUG SUMMERTREE APPROX
W.E.I. JOB NO. 86-103 SHEET NO. 10 OF 82

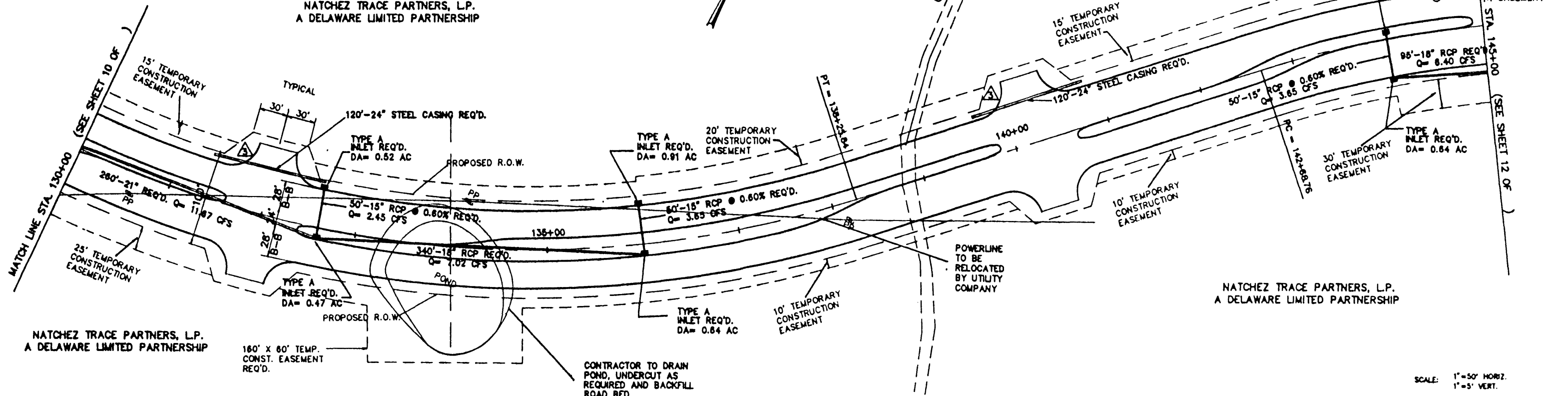
PI STA = 133+74.84
 $\Delta = 50^{\circ}32'30''$
 $R = 1099.90'$
 $T = 519.24'$
 $L = 970.24'$



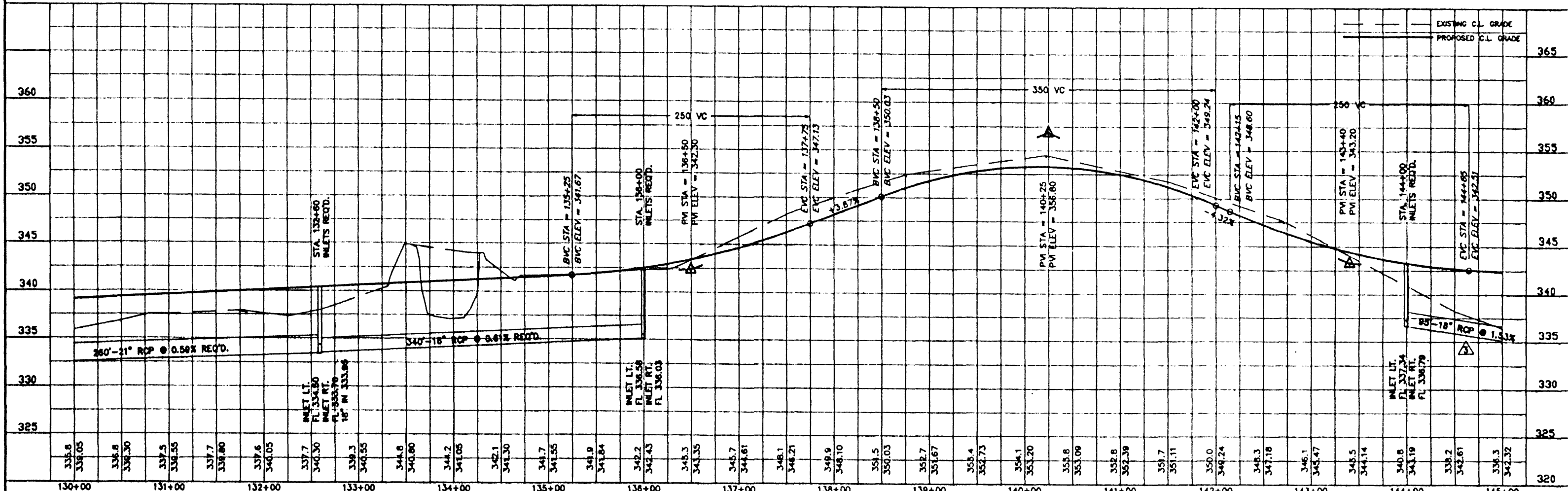
NATCHEZ TRACE PARTNERS, L.P.
A DELAWARE LIMITED PARTNERSHIP

NATCHEZ TRACE PARTNERS, L.P.
A DELAWARE LIMITED PARTNERSHIP

30' X 70' TEMP. CONST. EASEMENT REQ'D.
 NEW POND LIMITS
 CONTRACTOR TO DRAIN AND UNDERCUT POND AND BACKFILL AS NEEDED
 TYPE A INLET REQ'D. DA = 0.91 AC
 25' TEMPORARY CONSTRUCTION EASEMENT
 MATCH LINE STA. 145+00 (SEE SHEET 12 OF)



SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

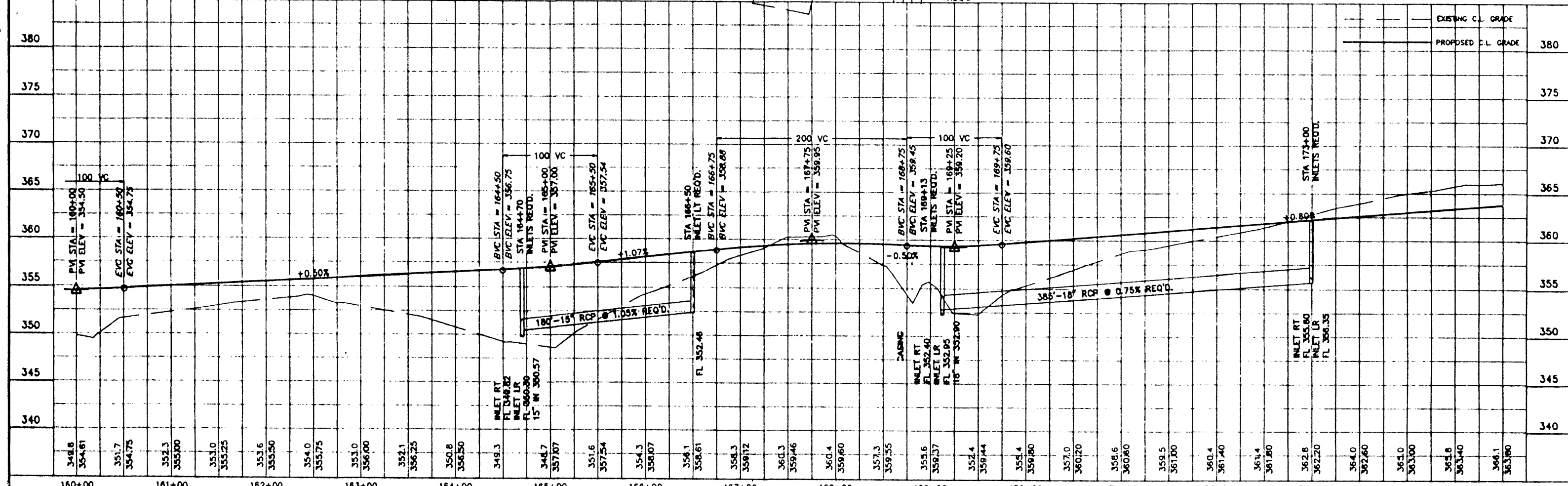
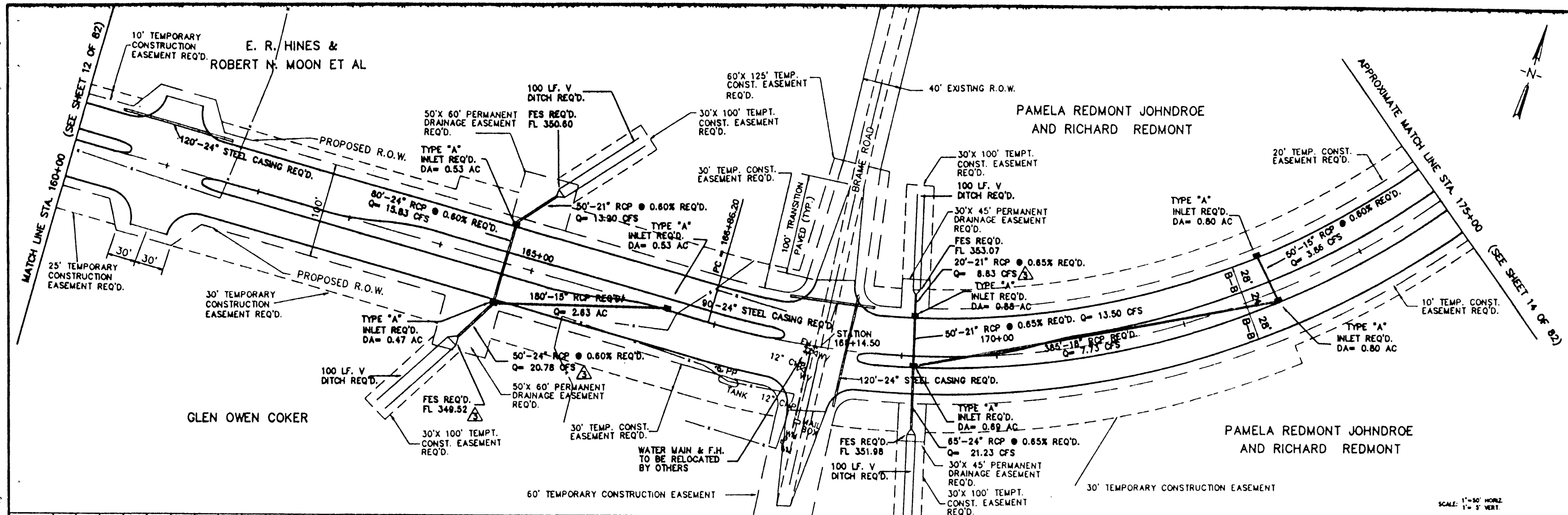


3	8-27	CASINGS ADDED GRADE CHANGED	R.H.	DESIGNED	DATE	8-27-88
2	4-08	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	J.S.	DRAWN	SCALE	AS SHOWN
NO.	DATE	REVISIONS	BY			

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACOA PATH ROUTE
 C-1000/SUMMERTREE PPKR
 W.E.I. JOB NO. 88-103
 SHEET NO. 11 OF 82

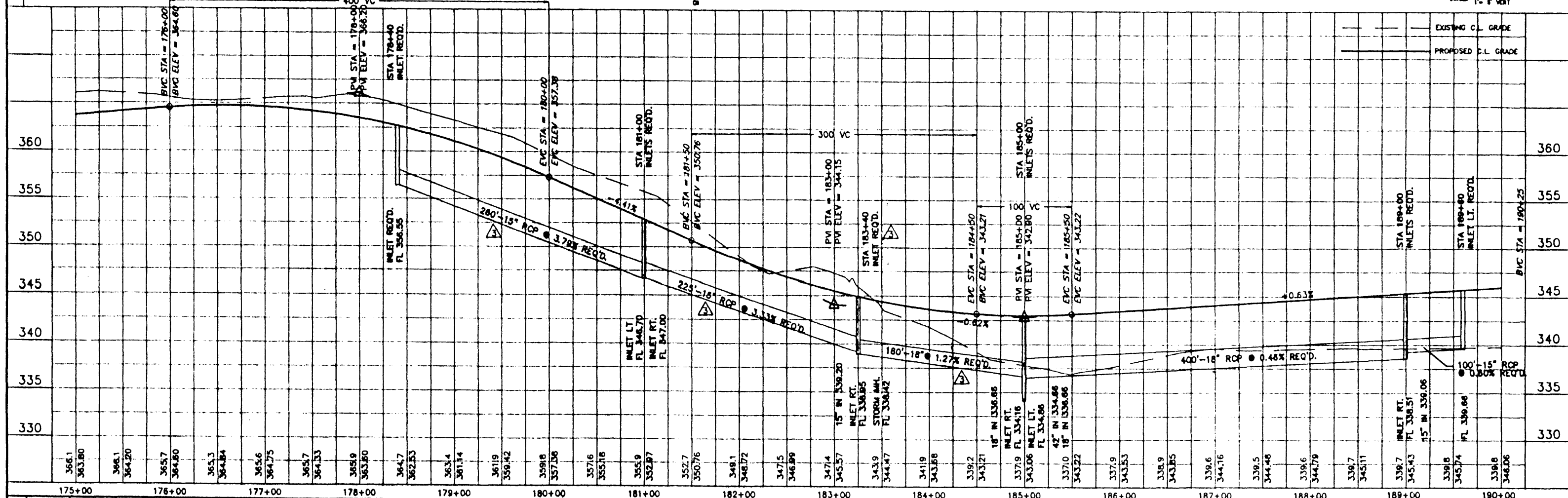
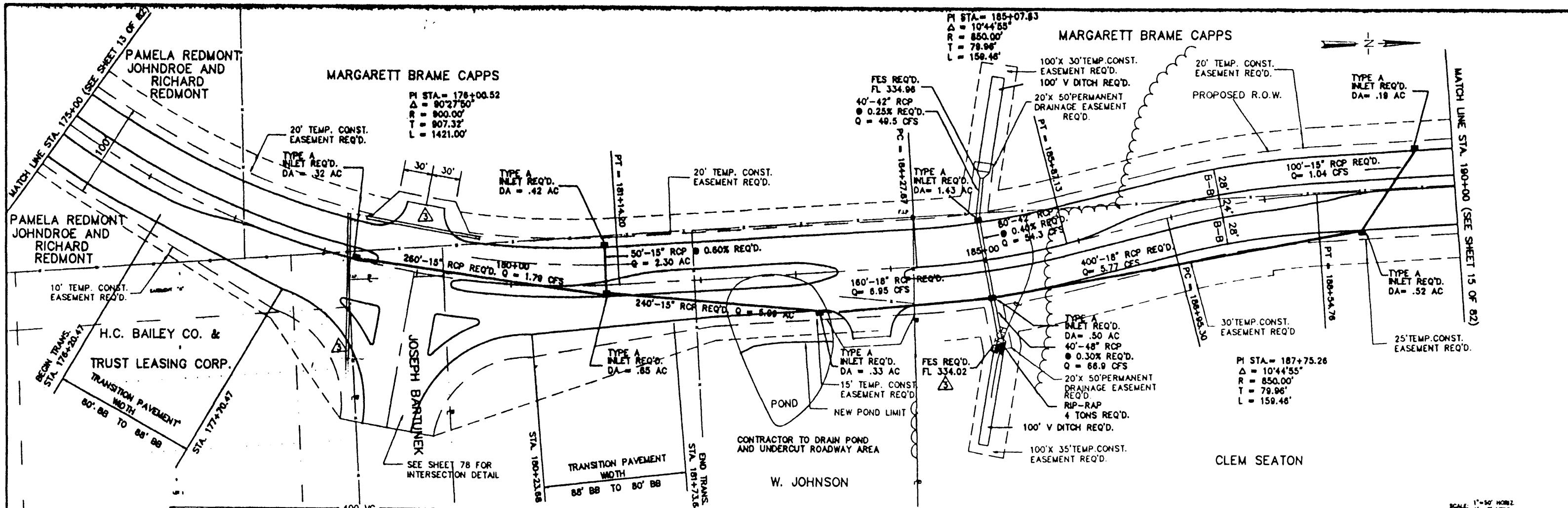


NO.	DATE	REVISIONS	BY	DESIGNED	DATE	SCALE	AS SHOWN
3	08-27-80	REVISED FLOW LINES			1-28-88		
2	04-05-80	CHECKED CURVE DATA, P.I. STA. & PROPONENTS - REVISED TURNOUTS					
1	12-12-79	FINAL REVISIONS					

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACAO PATH ROUTE
 G. LINDO, SUMMERTREE, PROJ 11
 W.E.L. JOB NO. 88-103
 SHEET NO. 13 of 82

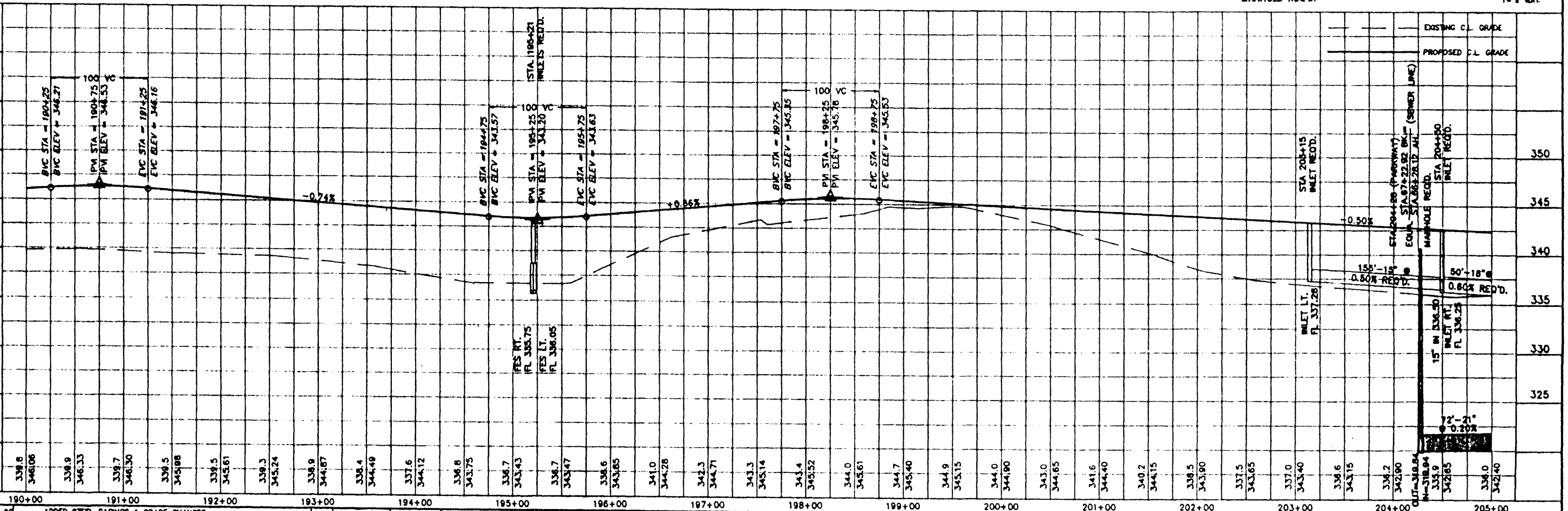
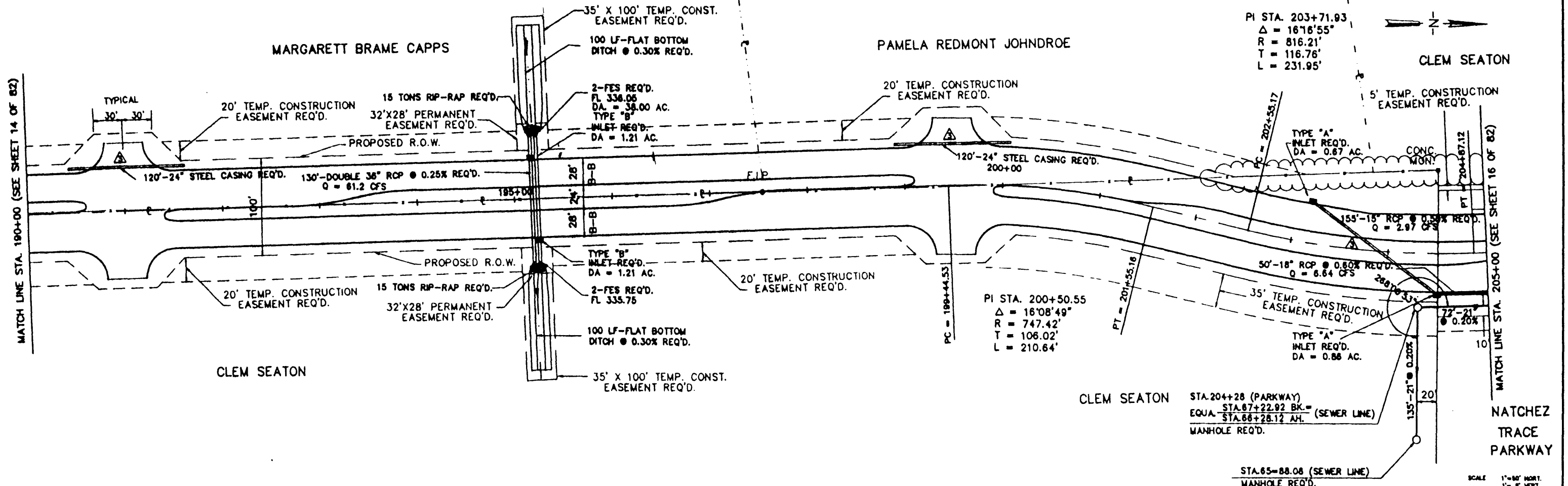


3	09-27-90	ADD CASING CHANGE GRADES	DESIGNED	DATE
2	04-05-90	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	DRAWN	8-27-89
1	12-13-88	FINAL REVISIONS	SCALE	AS SHOWN
NO.	DATE	REVISIONS	BY	

WACONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACAD. PATH ROUTE
W.E.L. JOB NO. 88-103
SHEET NO. 14 of 82

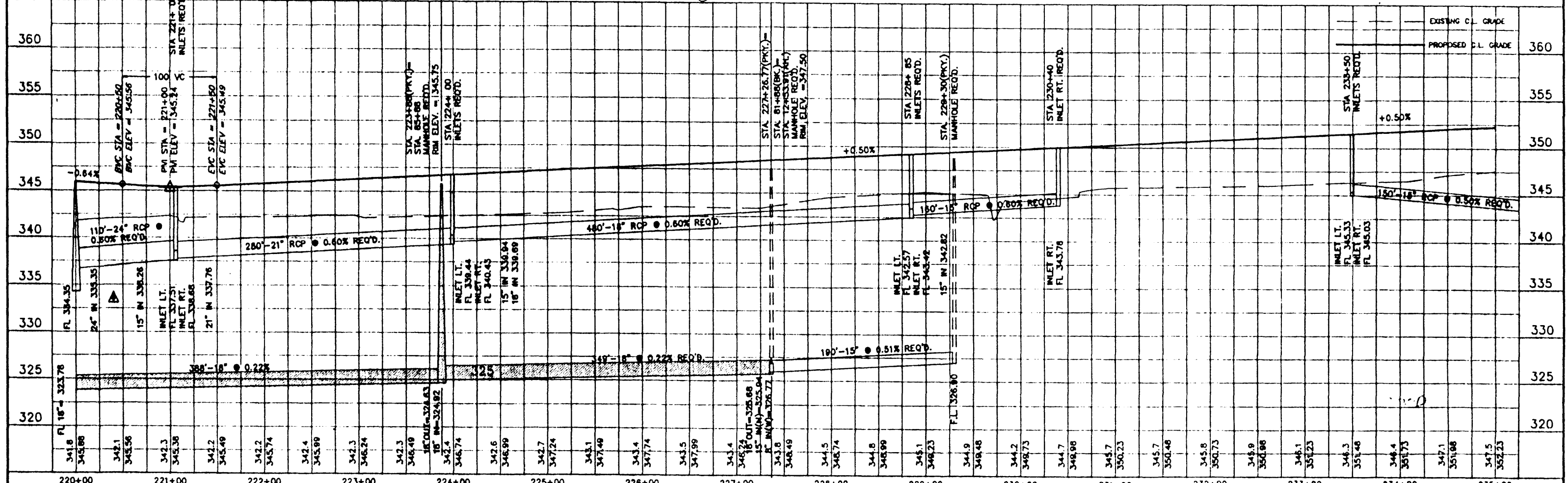
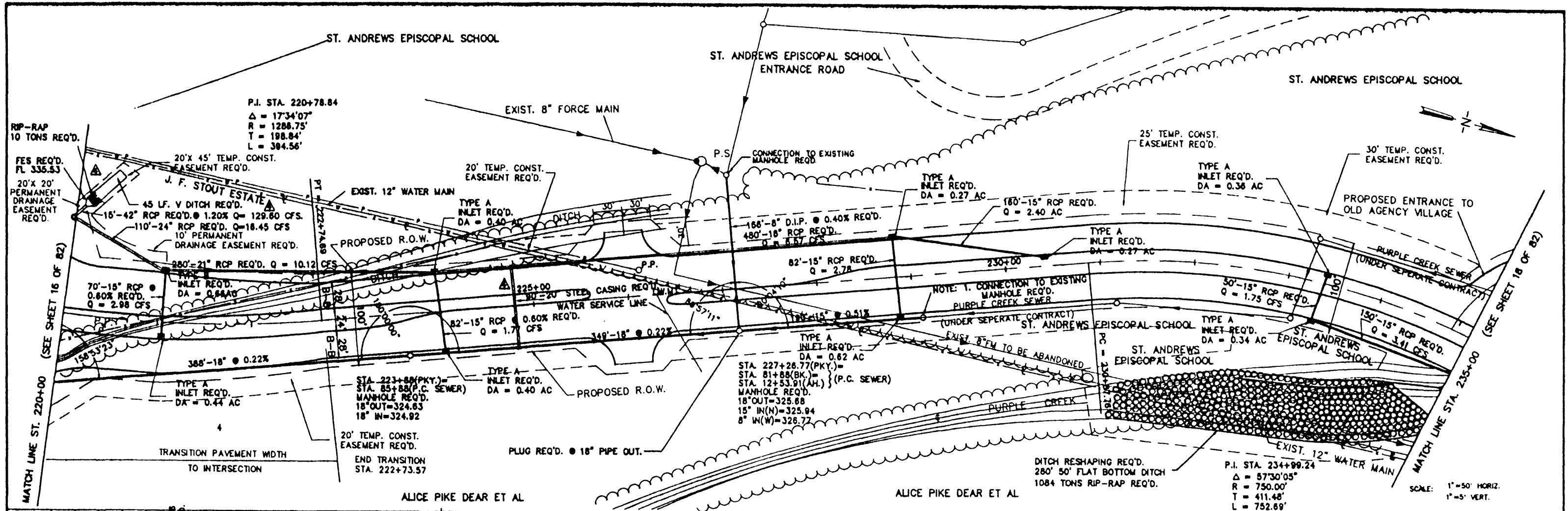


3	8-21-88	ADDED STEEL CASINGS & GRADE CHANGES	H.L.	DESIGNED	DATE	8-27-88
2	8-10-88	ADDED PURPLE CREEK SEWER CONSTRUCTION PLANS	C.S.	DRAWN	SCALE	AS SHOWN
1	7-21-88	FINAL REVISIONS	J.P.	BY		

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACAD PATH ROUTE	G:\DWG\SUMTREE\PROJ13
W.E.L. JOB NO.	88-103
SHEET NO.	15 OF 82

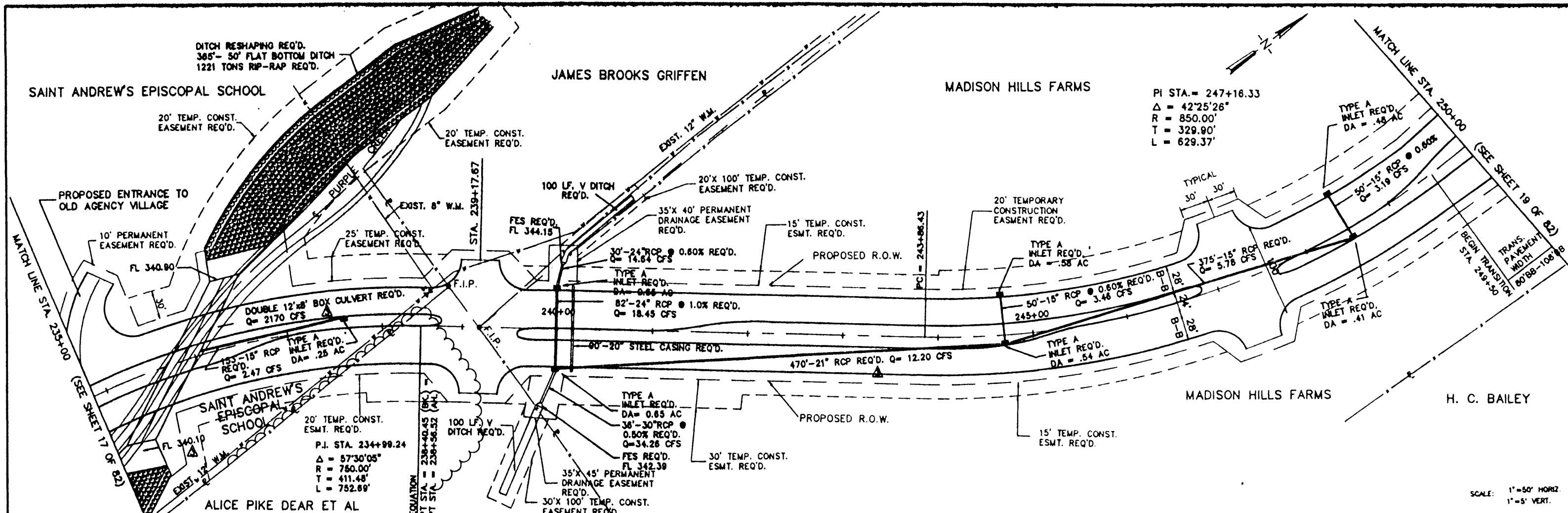


NO.	DATE	BY	REVISION
1	8-30-88		DESIGNED
2			SCALE
3			AS SHOWN

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

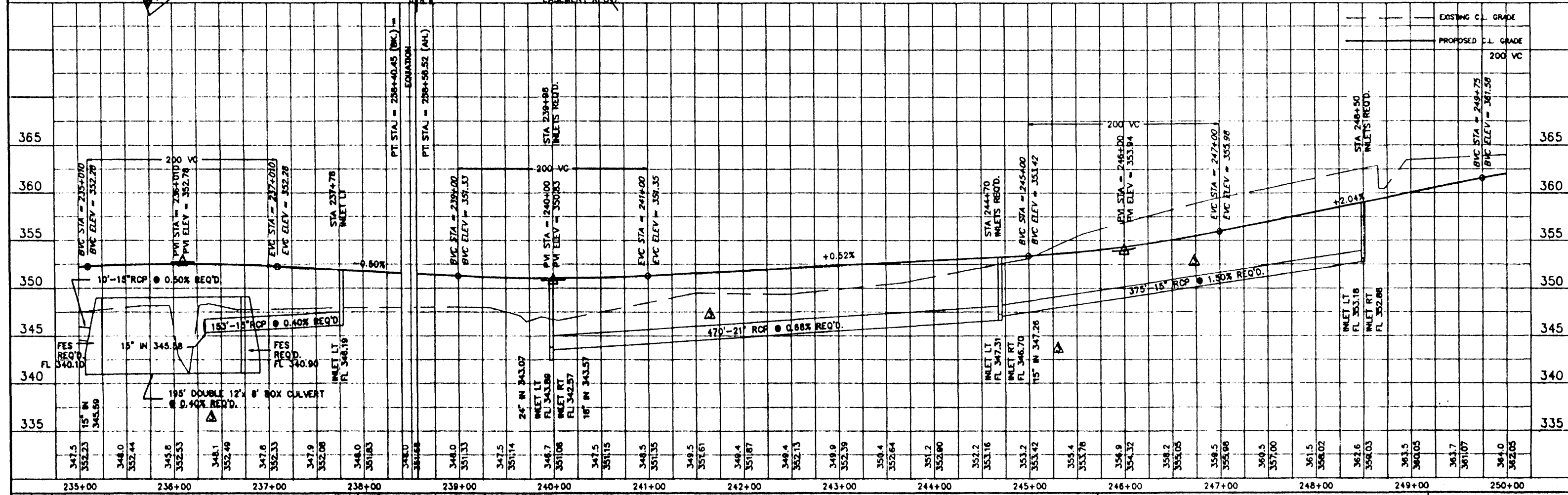
SUMMERTREE PARKWAY

ACAD PATH ROUTE
 C:\DWG\SUMMERTREE\PROJ018
 WEL JOB NO. SHEET NO.
 88-103 17 of 82



PI STA. = 247+16.33
 $\Delta = 42^{\circ}25'26''$
 $R = 850.00'$
 $T = 329.90'$
 $L = 629.37'$

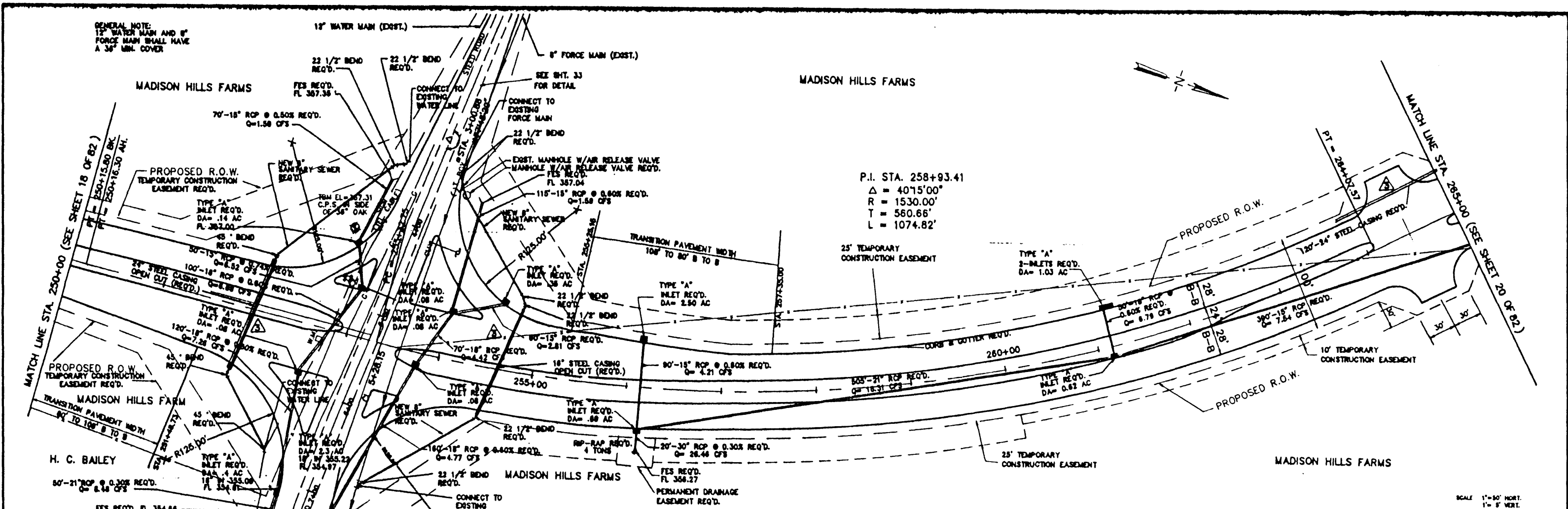
SCALE: 1" = 50' HORIZ
 1" = 5' VERT.



NO	DATE	REVISIONS	DESIGNED	DATE	DRAWN	SCALE	AS SHOWN
3	8-27	PIPE SIZE & FL					
2	8-08	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS					
1	11-1	FINAL REVISIONS					

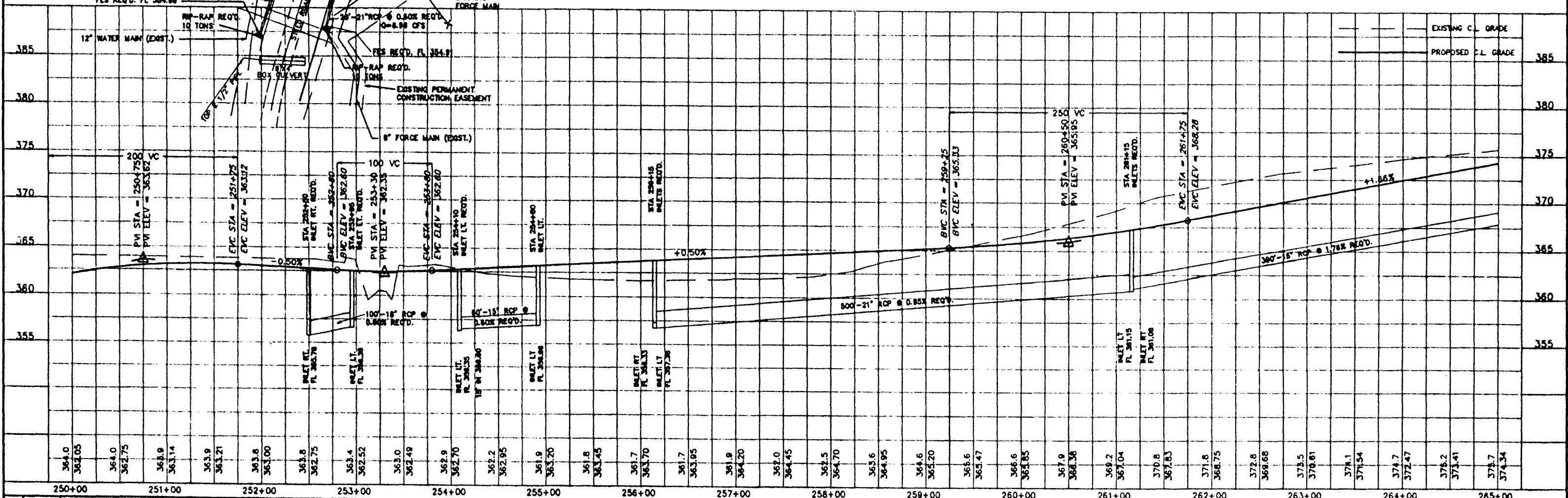
WAGGONER ENGINEERING INC. CONSULTING ENGINEERS		JACKSON / BRANDON, MISSISSIPPI	
SUMMERTREE PARKWAY			
ACAD PATH ROUTE		SHEET NO. 18 OF 82	
W.E.L. JOB NO. 88-182			

GENERAL NOTE:
12" WATER MAIN AND 8" FORCE MAIN SHALL HAVE A 36" MIN. COVER



P.I. STA. 258+93.41
 $\Delta = 40'15.00"$
 $R = 1530.00'$
 $T = 560.66'$
 $L = 1074.82'$

SCALE 1"=50' HORIZ.
1"=5' VERT.

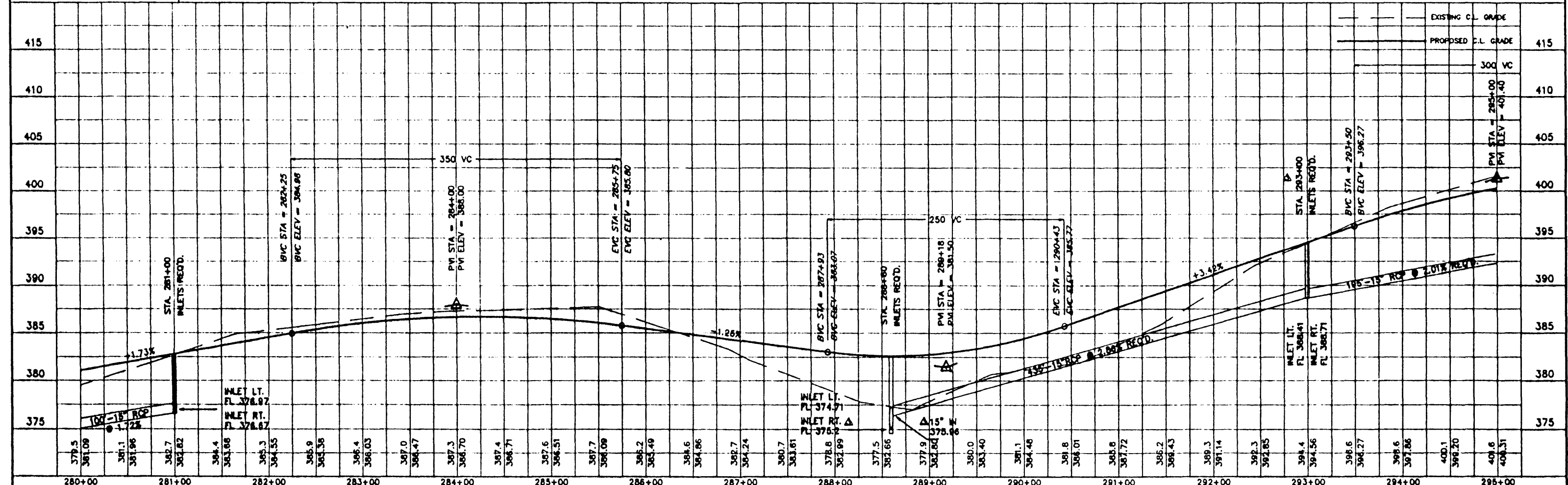
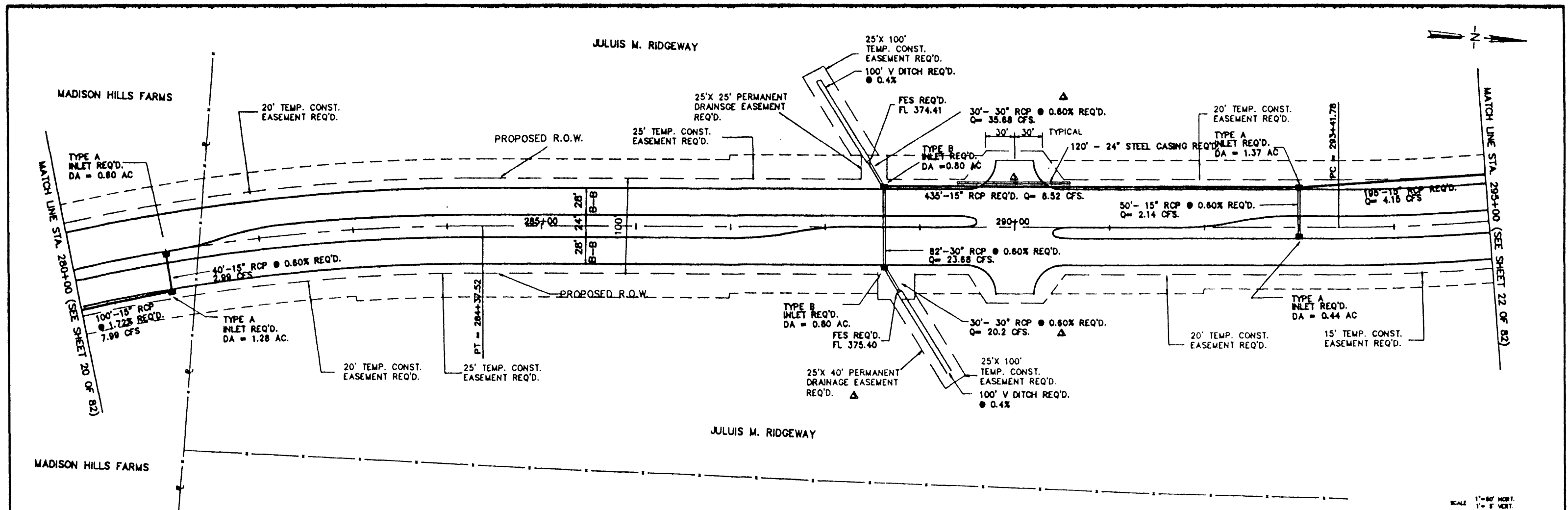


3	08-24-84	ADDED STEEL CASINGS	H.I.	DESIGNED	DATE	8-27-88
2	04-18-84	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	C.S.	BY	R. C.	
1	11-11-80	REVISED AS PER LINE CHANGE	C.S.	DRAWN	SCALE	AS SHOWN
NO.	DATE	REVISIONS	BY	R. C.	AS SHOWN	

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

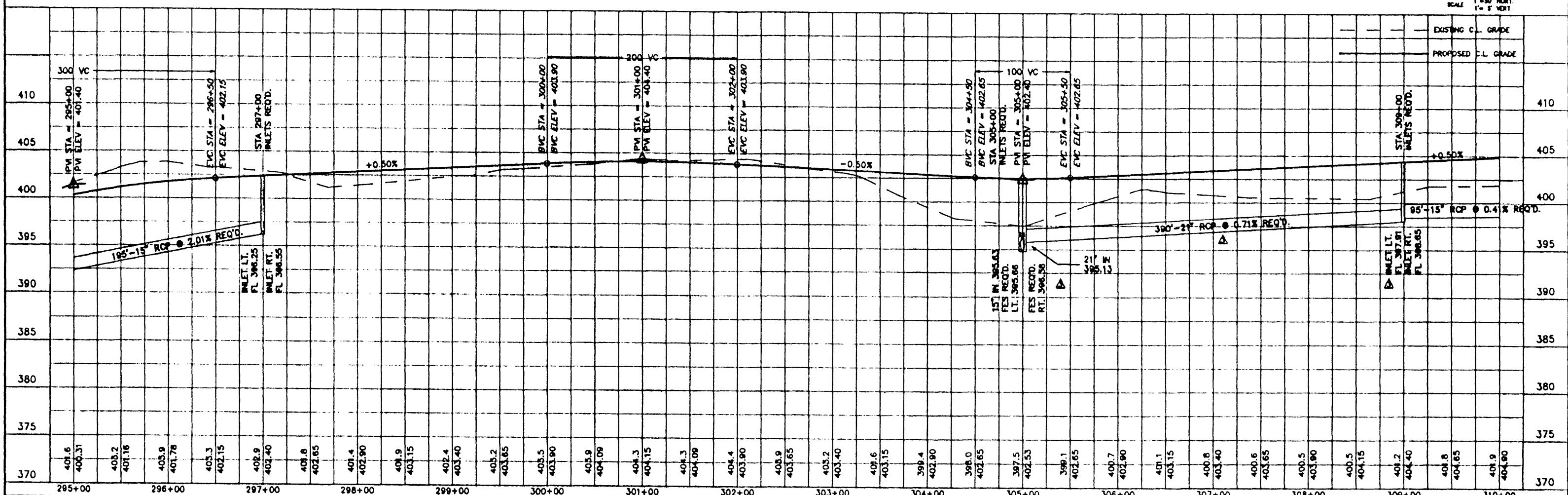
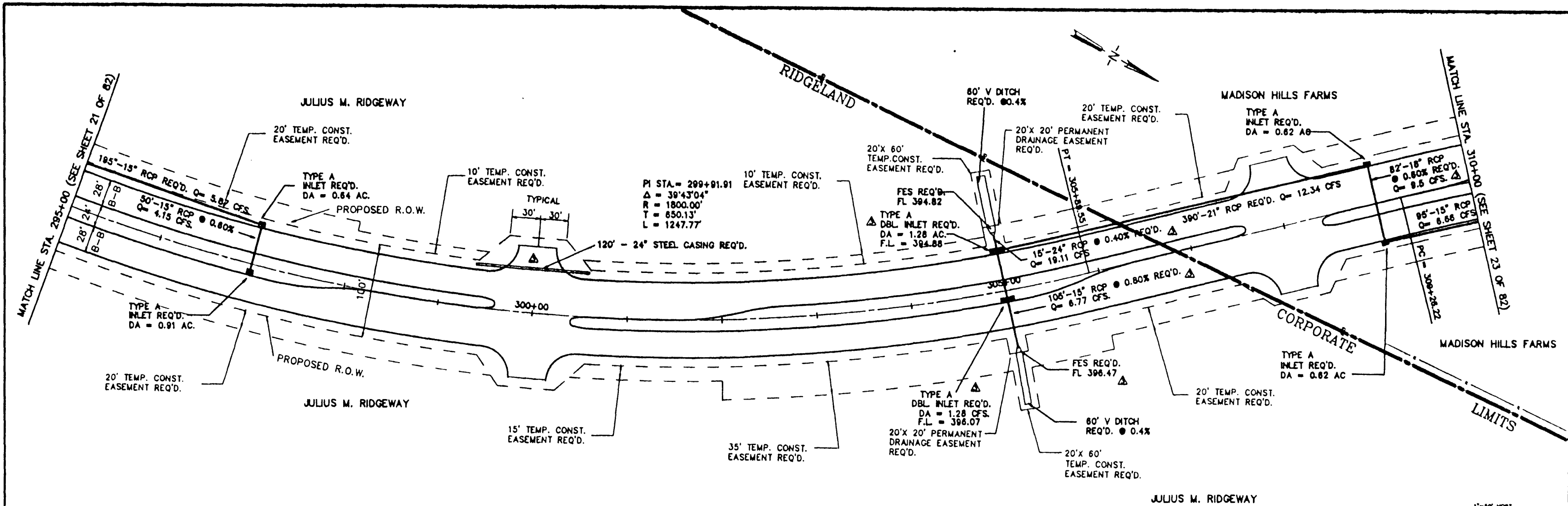
ACAD PATH ROUTE
 C. LONG SUMMERTREE PROJECT
 W.E.L. JOB NO. 88-103
 SHEET NO. 19 OF 82



WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

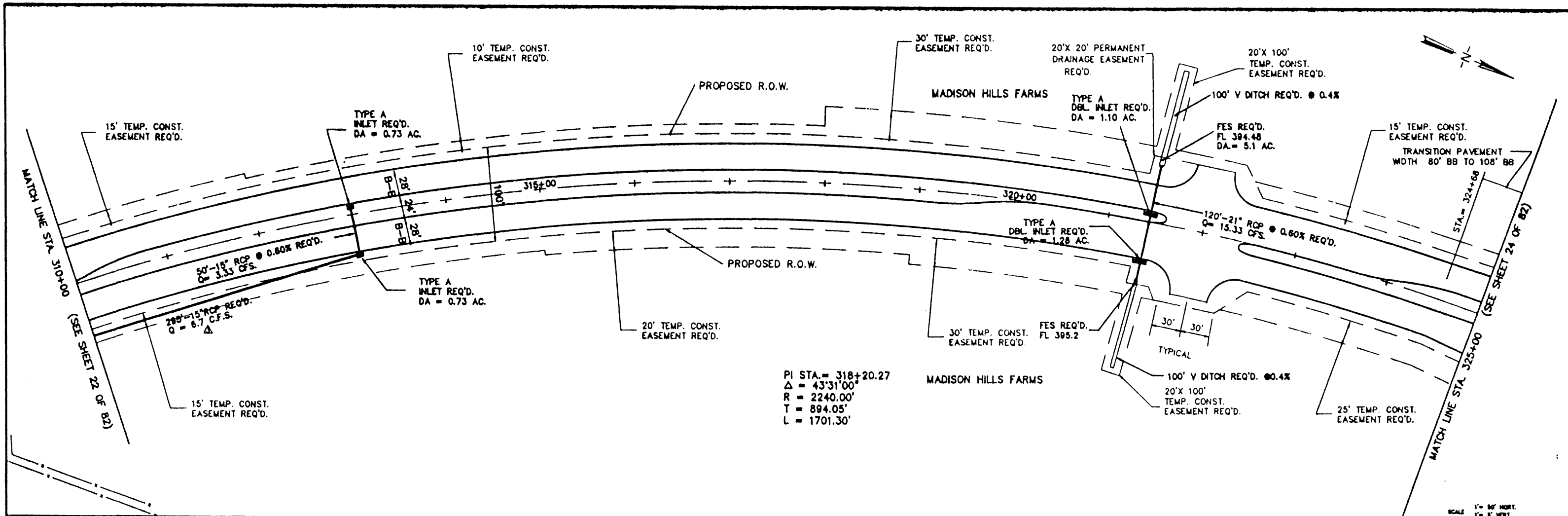
ACAD PATH ROUTE
 G:\DWG\PLAN\WEE\990818
 WEL JOB NO. SHEET NO.
 88-103 21 of 82



WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

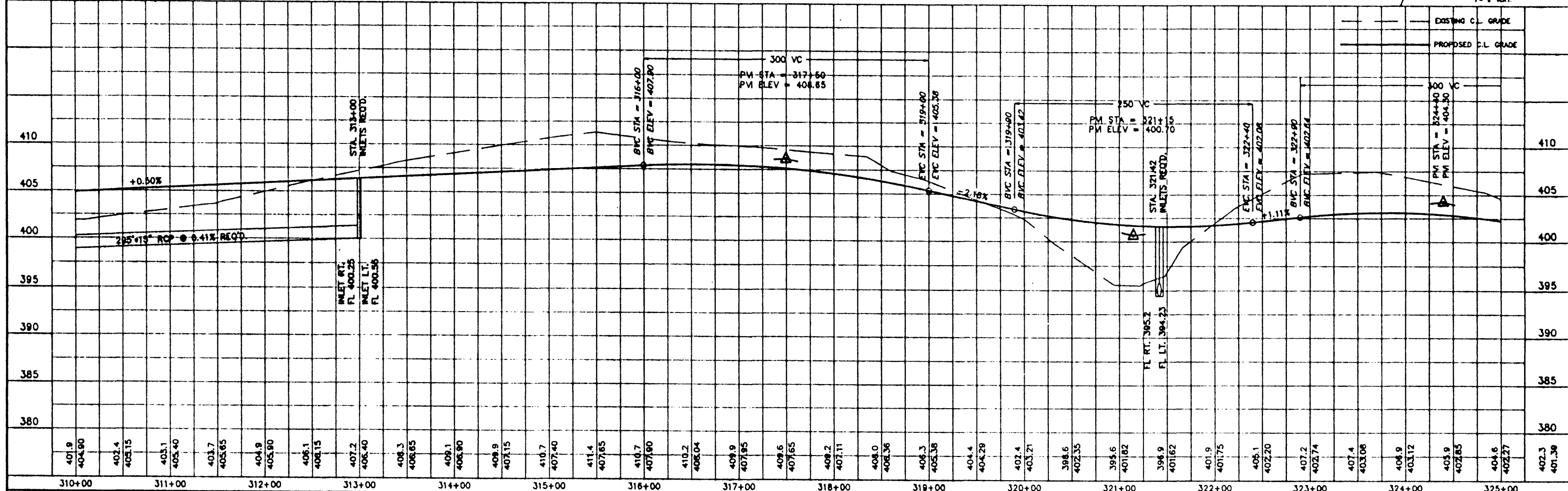
SUNNERTREE PARKWAY

ACAD PATH ROUTE
 C:\DWG\SUNNERTREE\PROJ20
 W.E.L. JOB NO. 88-103 SHEET NO. 22 OF 82



PI STA = 318+20.27
 Δ = 43°31'00"
 R = 2240.00'
 T = 894.05'
 L = 1701.30'

SCALE
 1" = 40' HORIZ.
 1" = 4' VERT.

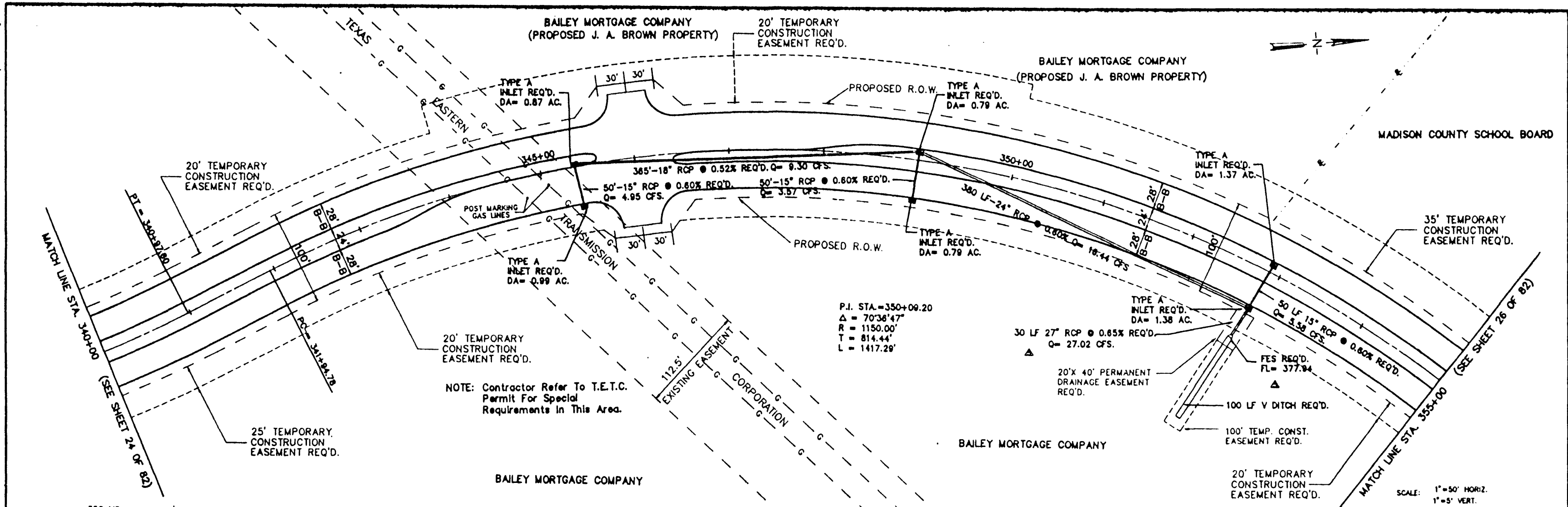


NO.	DATE	REVISIONS	BY	DESIGNED	DATE	SCALE	AS SHOWN
3	8-20-80	REVISE STORM DRAINAGE DATA	R.C.	DESIGNED	8-27-80		
2	1-16-80	REVISE CURVE DATA	H.J.				
1	12-15-79	FINAL REVISIONS	J.P.	DRAWN			

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

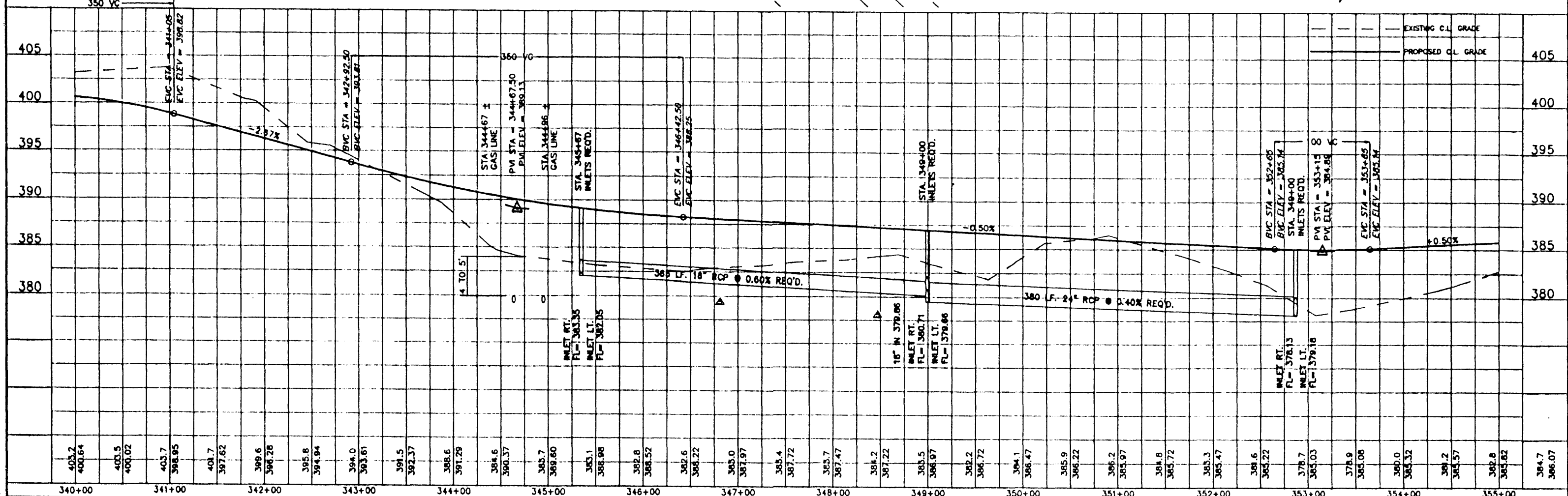
ACAD PATH ROUTE
 C:\DWG\SUMMERTREE\PROJ21
 W.E.L. JOB NO. 88-103
 SHEET NO. 23 OF 82



NOTE: Contractor Refer To T.E.T.C. Permit For Special Requirements In This Area.

P.I. STA = 350+09.20
 $\Delta = 70'36''47''$
 $R = 1150.00'$
 $T = 814.44'$
 $L = 1417.29'$

SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.

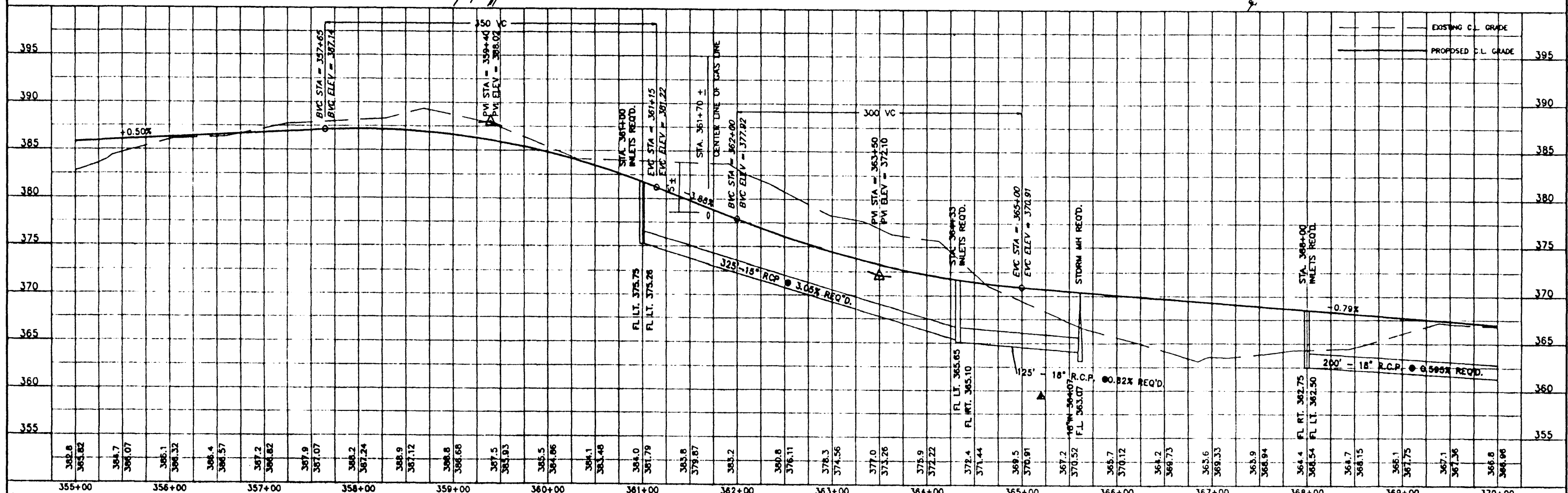
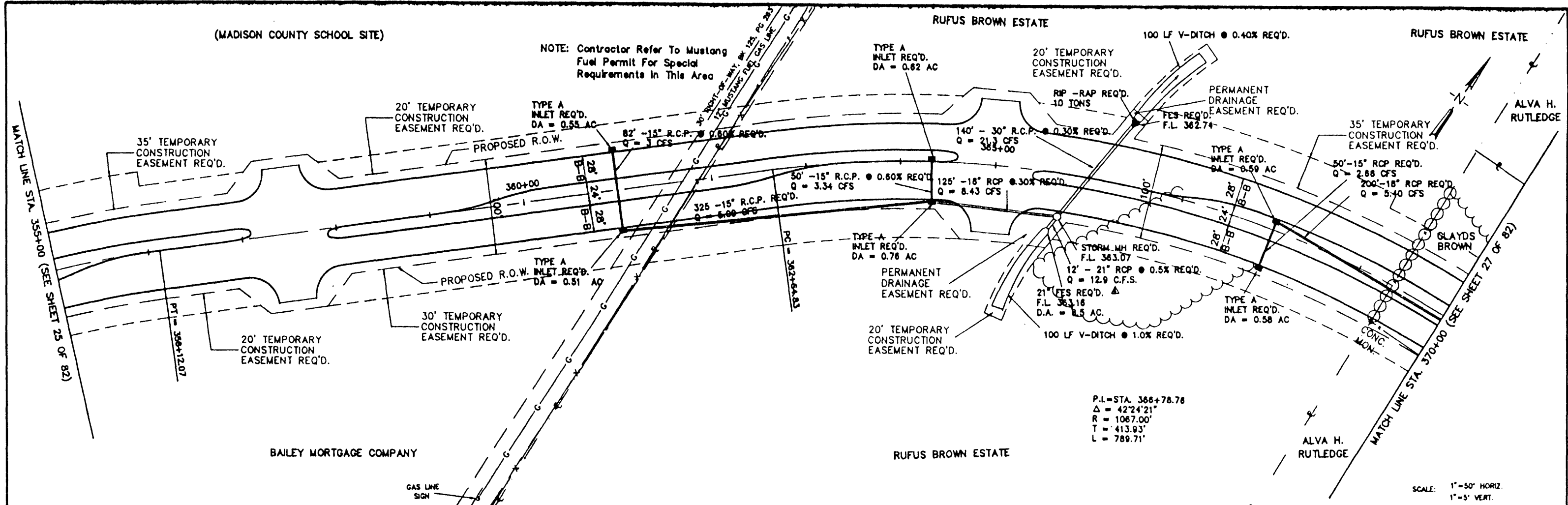


NO.	DATE	REVISIONS	BY	R.C.	DESIGNED	DATE	SCALE
1	8-20	REVISED STORM DRAINAGE DATA				8-28-89	
2	8-21	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS					
3	8-21	REVISED TEMPORARY CONSTRUCTION LIMITS					

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

ACAD PATH ROUTE
 C:\DWG\SUM TREE\PPR023
 W.E.I. JOB NO. 88-103 SHEET NO. 25 of 82



4	8-20	REVISED STORM DRAINAGE DATA	R.C.	DESIGNED	DATE
3	4-19	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	C.E.		7-24-88
2	1-28	ADDED TEMPORARY CONSTRUCTION LIMITS	D.R.	DRAWN	SCALE
NO	DATE	REVISIONS	BY	R.C.	AS SHOWN

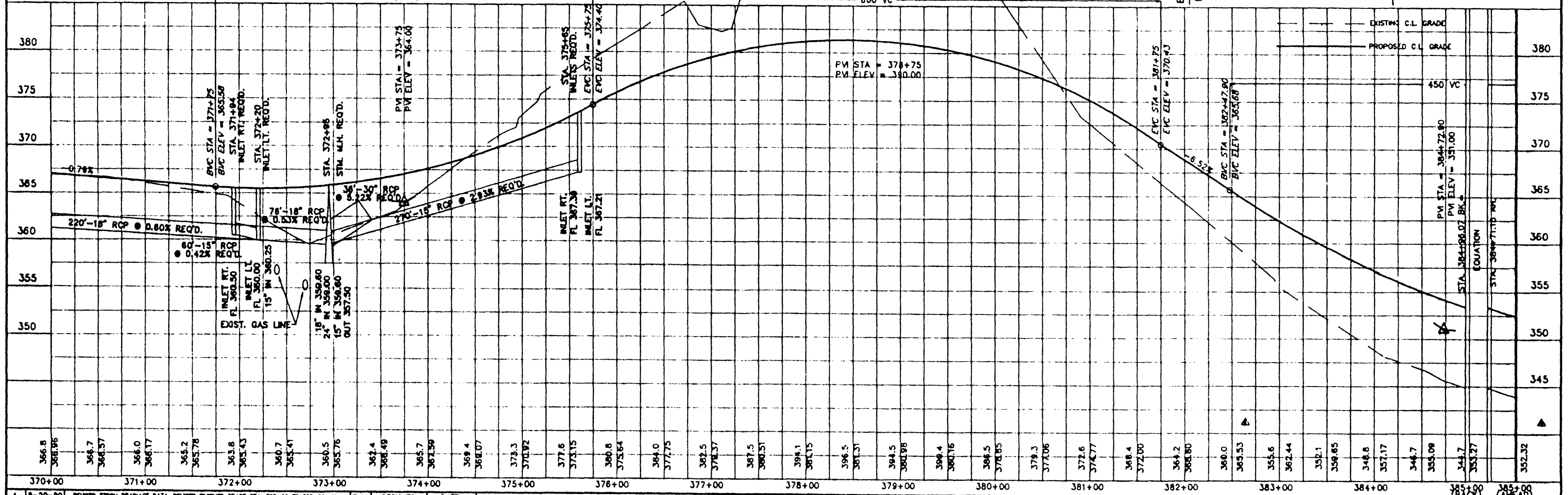
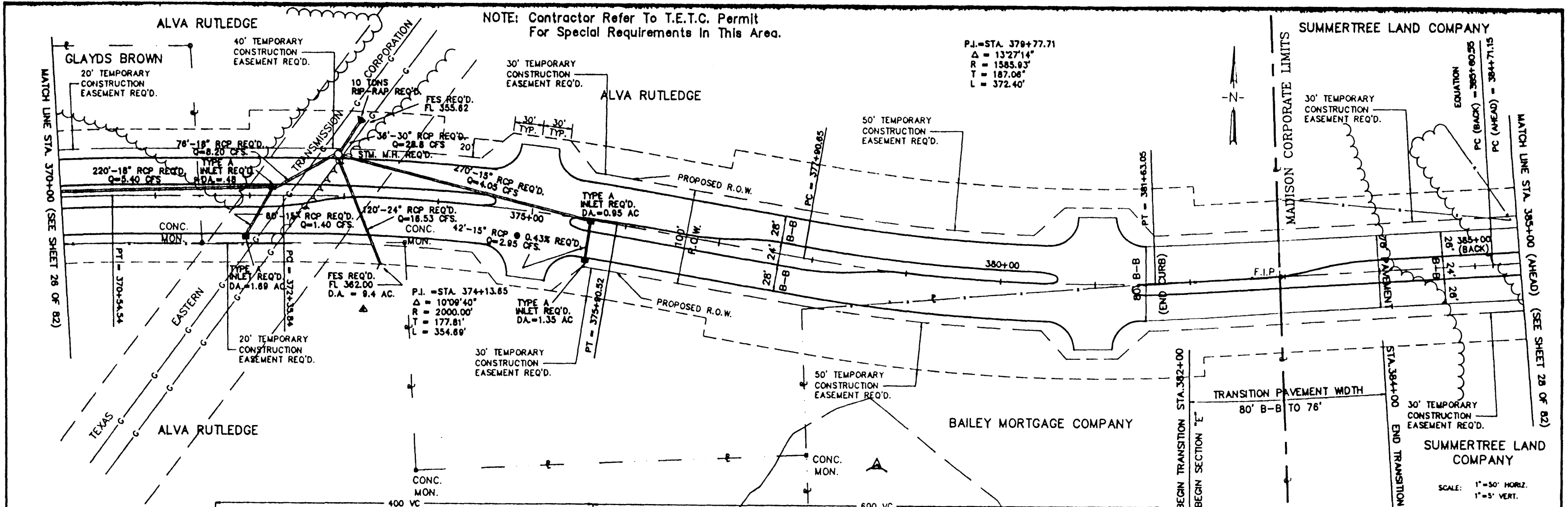
WACONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

SUNNERTREE PARKWAY

ACAD PATH ROUTE
Q:\PROJ\SUNNERTREE\PROJ24
W.E.L. JOB NO. 88-103 SHEET NO. 26 of 82

NOTE: Contractor Refer To T.E.T.C. Permit For Special Requirements In This Area.

P.I. = STA. 379+77.71
 $\Delta = 13'27.14"$
 $R = 1585.93'$
 $T = 187.06'$
 $L = 372.40'$



NO.	DATE	REVISIONS	BY	DATE	SCALE	AS SHOWN
4	8-20-80	REVISED FROM DRAINAGE DATA, REVISED FINISHED GRADE STA. 382+00 TO 386+00 AL.	R.C.	DESIGNED	DATE	8-30-80
3	4-18-80	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	P.S.	DRAWN	SCALE	
2	1-27-80	REVISED TEMPORARY CONSTRUCTION LIMITS	P.S.	BY	R.C.	
1						

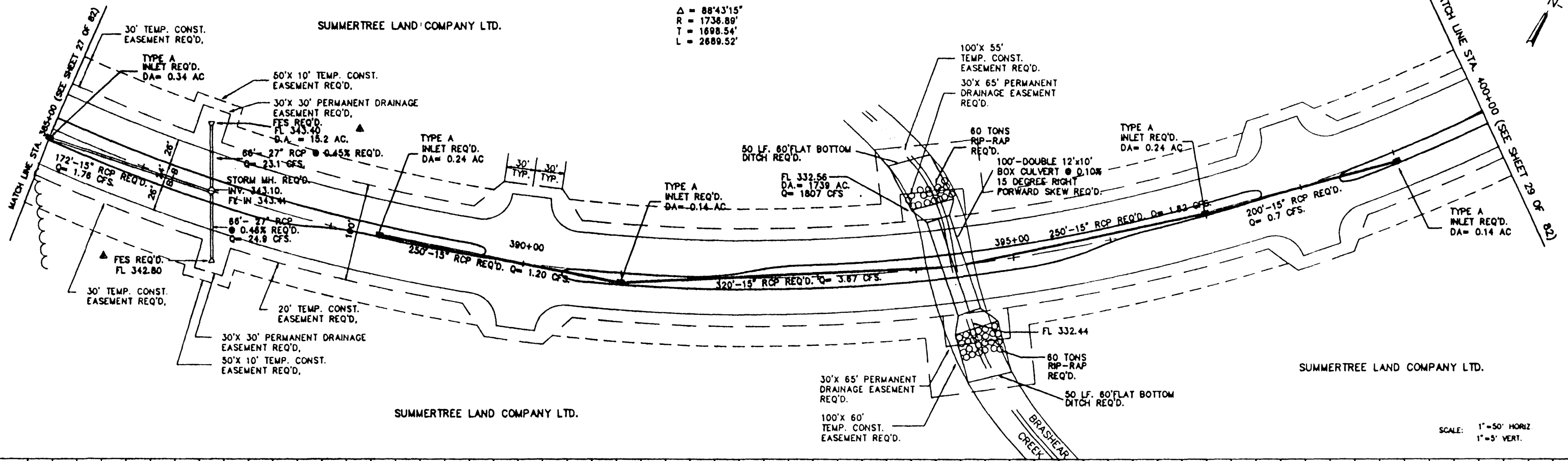
WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI

SUMMERTREE PARKWAY

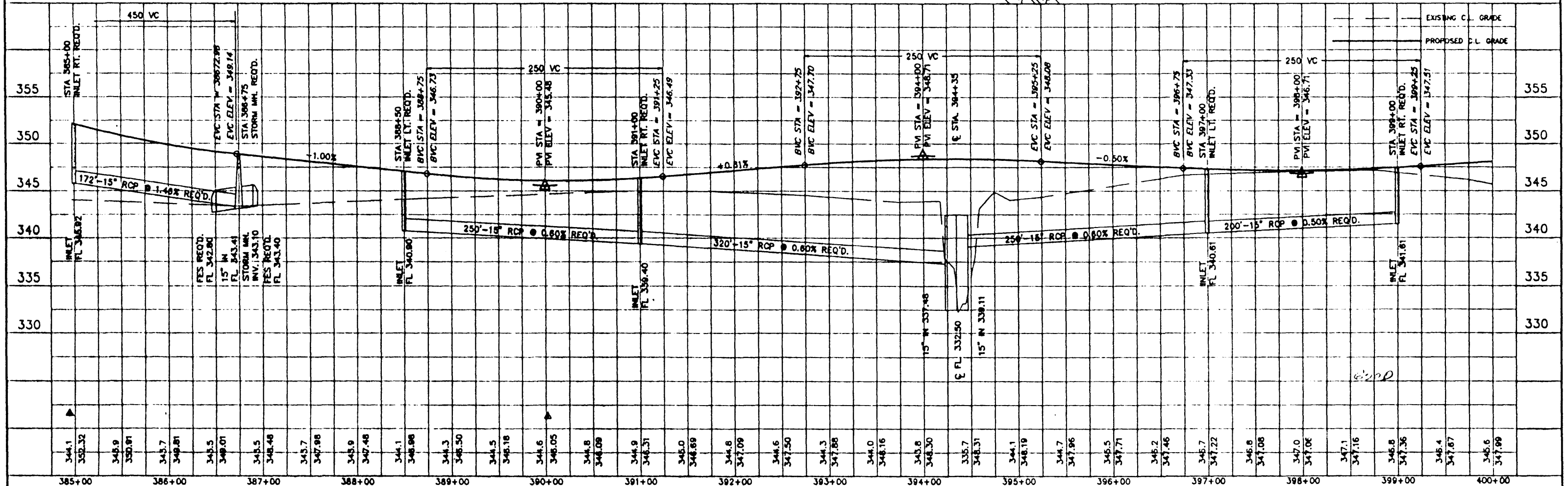
ACAD. PATH ROUTE
 C. DWG. SUMMERTREE APPROX.
 W.E.L. JOB NO. 88-103
 SHEET NO. 27 OF 82

SUMMERTREE LAND COMPANY LTD.

P.I. STA. = 388+81.58
 $\Delta = 88^{\circ}43'15''$
 $R = 1736.89'$
 $T = 1698.54'$
 $L = 2689.52'$



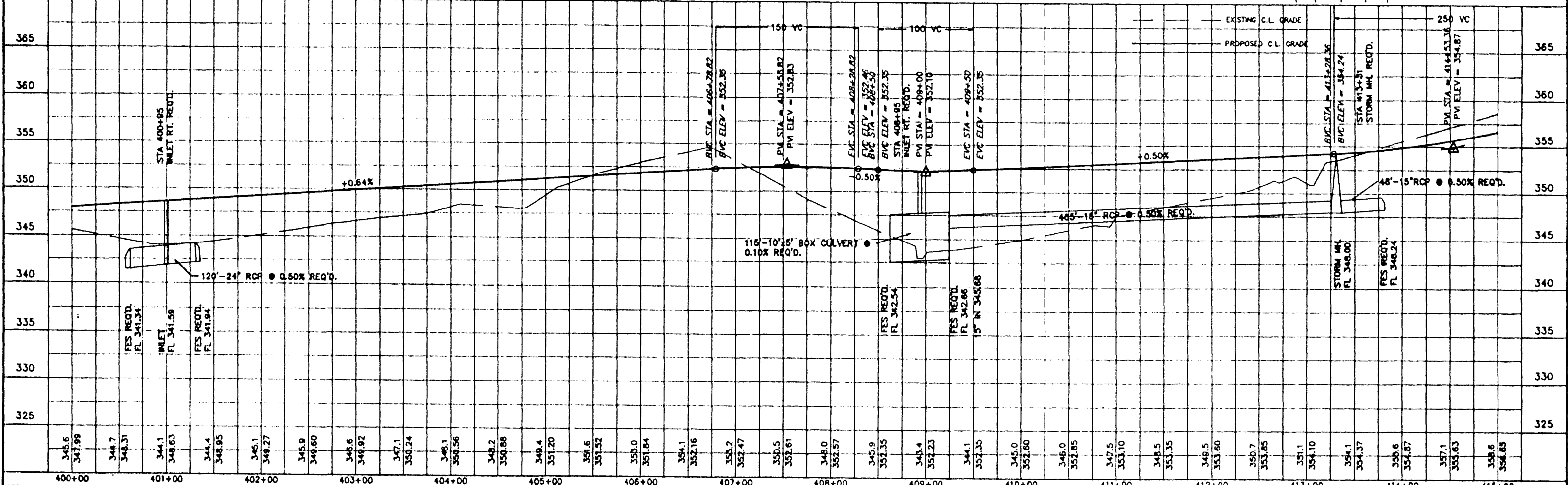
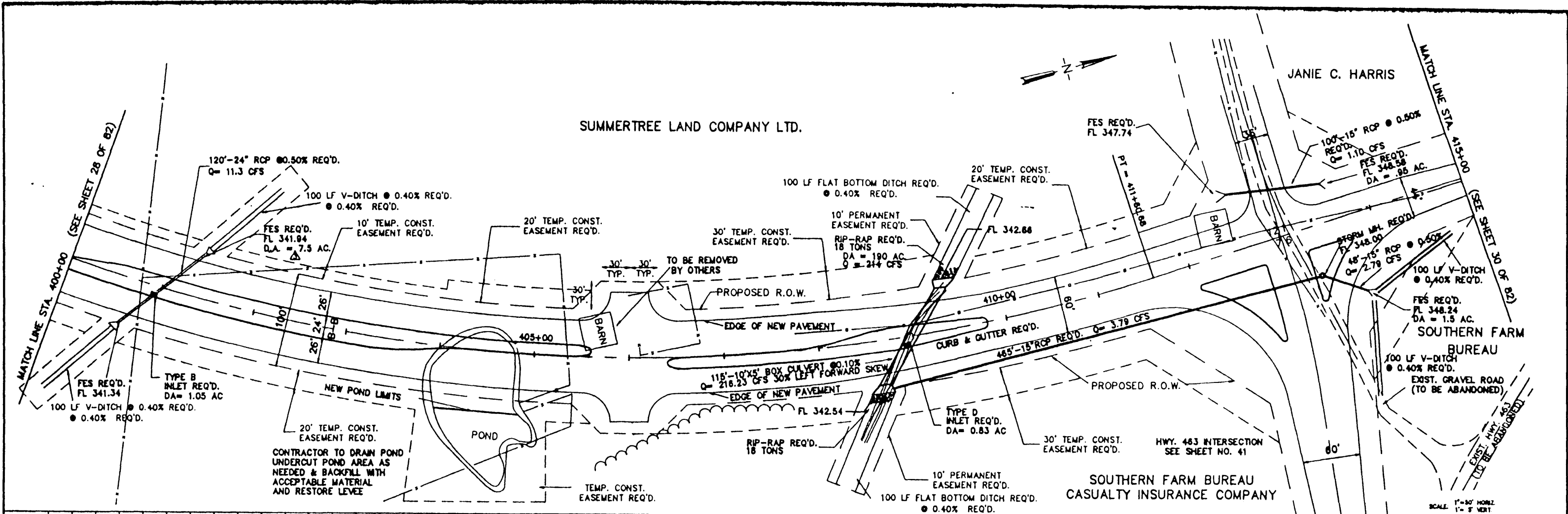
SCALE: 1" = 50' HORIZ
 1" = 5' VERT.



NO.	DATE	REVISIONS	BY
1	8-20-80	REVISED STORM DRAINAGE DATA, REVISED FINISHED GRADE STA. 385+00 TO STA. 388+00	R.C.
2	4-18-80	CHECKED CURVE DATA, P.I. STA. & PROPERTY OWNERS	C.S.
3	1-27-80	REVISED TEMPORARY CONSTRUCTION LIMITS	C.S.

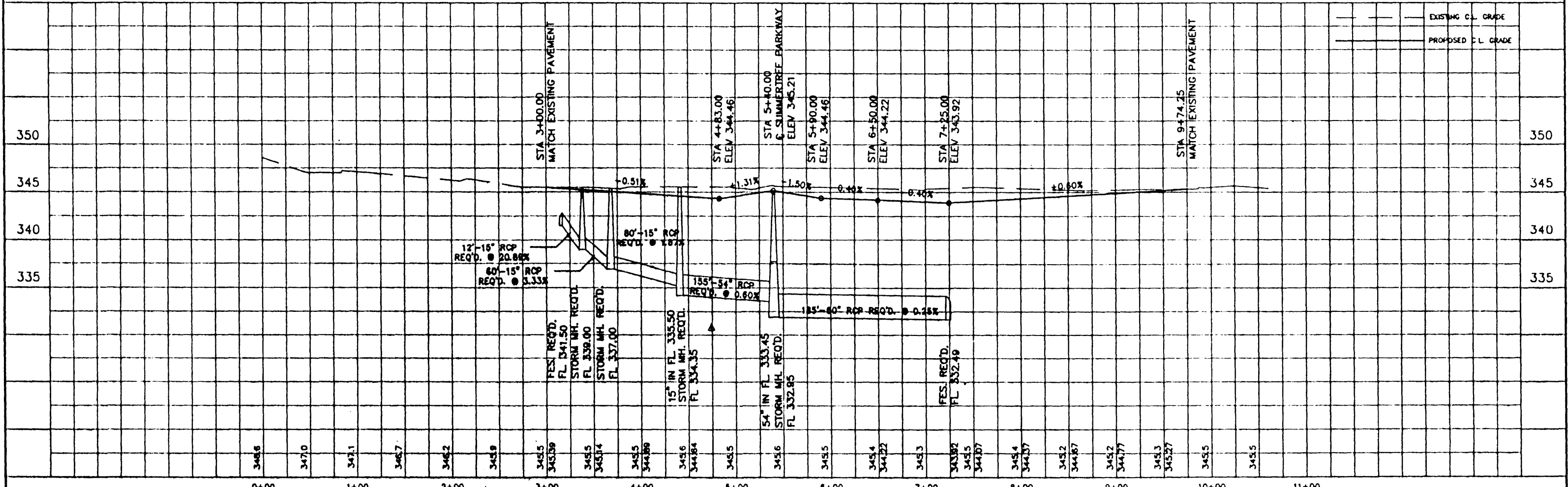
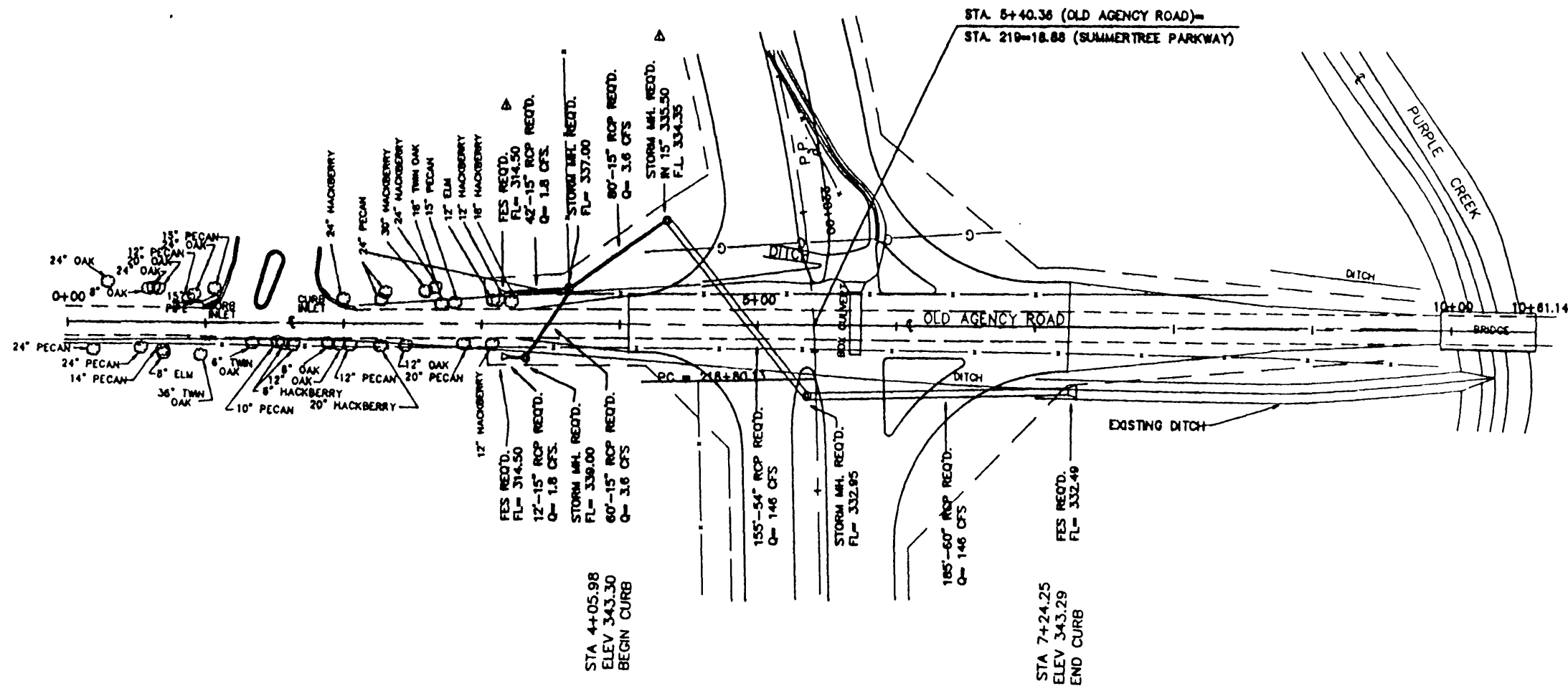
DESIGNED	DATE	WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
DRAWN	8-27-80	JACKSON / BRANDON, MISSISSIPPI
SCALE	AS SHOWN	

ACAD PATH ROUTE	
C:\DWG\SUMTREE\PROJ28	
W.E.L. JOB NO.	SHEET NO.
88-103	28 of 82



345.6	347.99	348.7	348.31	344.1	348.63	344.4	348.95	346.1	348.27	345.9	349.60	346.6	349.92	347.1	350.24	346.1	350.56	348.2	350.88	349.4	351.20	351.6	351.52	350.0	351.84	354.1	352.16	350.2	352.47	350.5	352.61	348.0	352.57	345.9	352.35	345.4	352.23	344.1	352.35	345.0	352.60	346.0	352.85	347.5	353.10	346.5	353.35	348.5	353.60	350.7	353.85	351.1	354.10	354.1	354.37	356.6	354.87	357.1	355.63	358.6	356.85
400+00	401+00	402+00	403+00	404+00	405+00	406+00	407+00	408+00	409+00	410+00	411+00	412+00	413+00	414+00	415+00																																														

DESIGNED: R.C. DATE: 8-27-89
 DRAWN: C.S. SCALE: AS SHOWN
 WACONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON / BRANDON, MISSISSIPPI
 SUMMERTREE PARKWAY
 ACAD PATH ROUTE
 C:\DWG\SUMMERTREE\PROJ27
 W.E.I. JOB NO. 88-103 SHEET NO. 29 OF 82



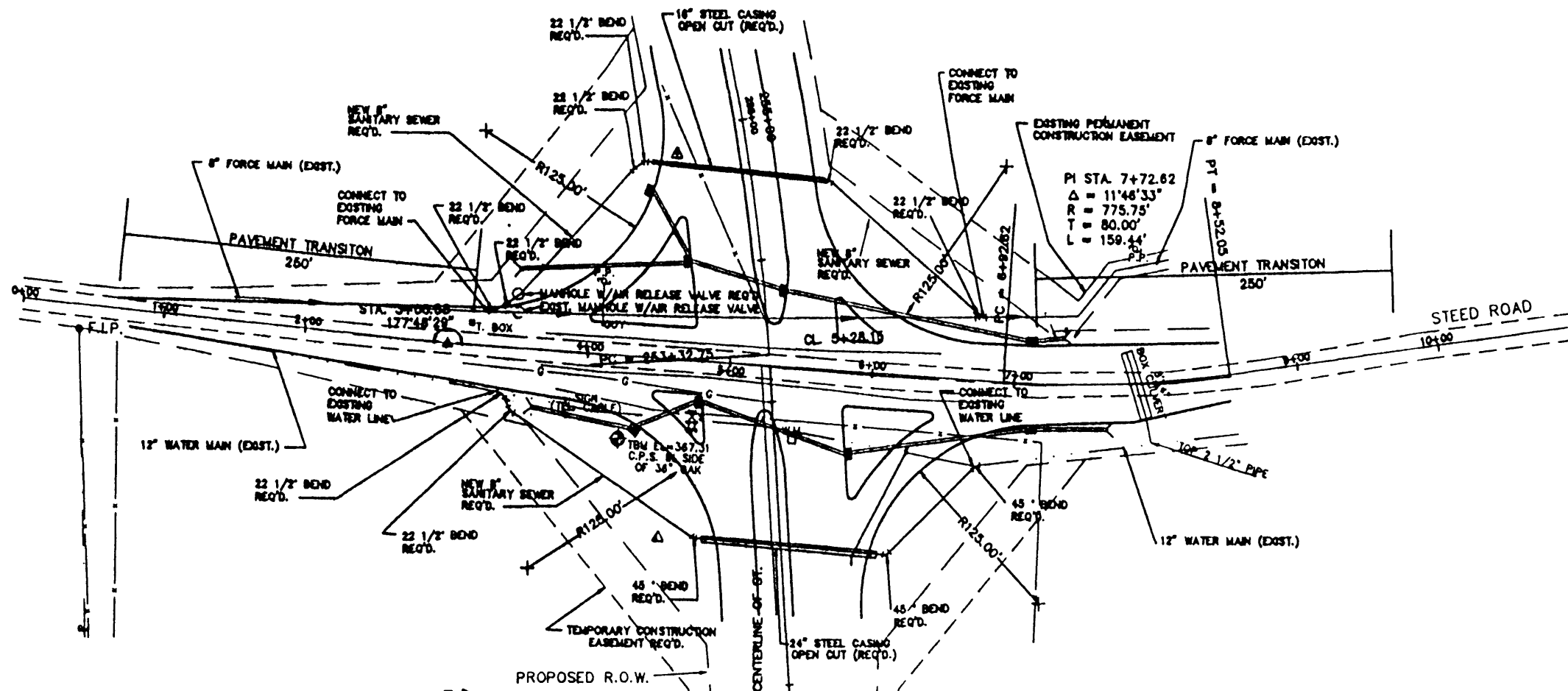
DESIGNED	DATE	11-10-88
DRAWN	SCALE	1" = 40'
BY	CHECKED	

WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
JACKSON / BRANDON, MISSISSIPPI

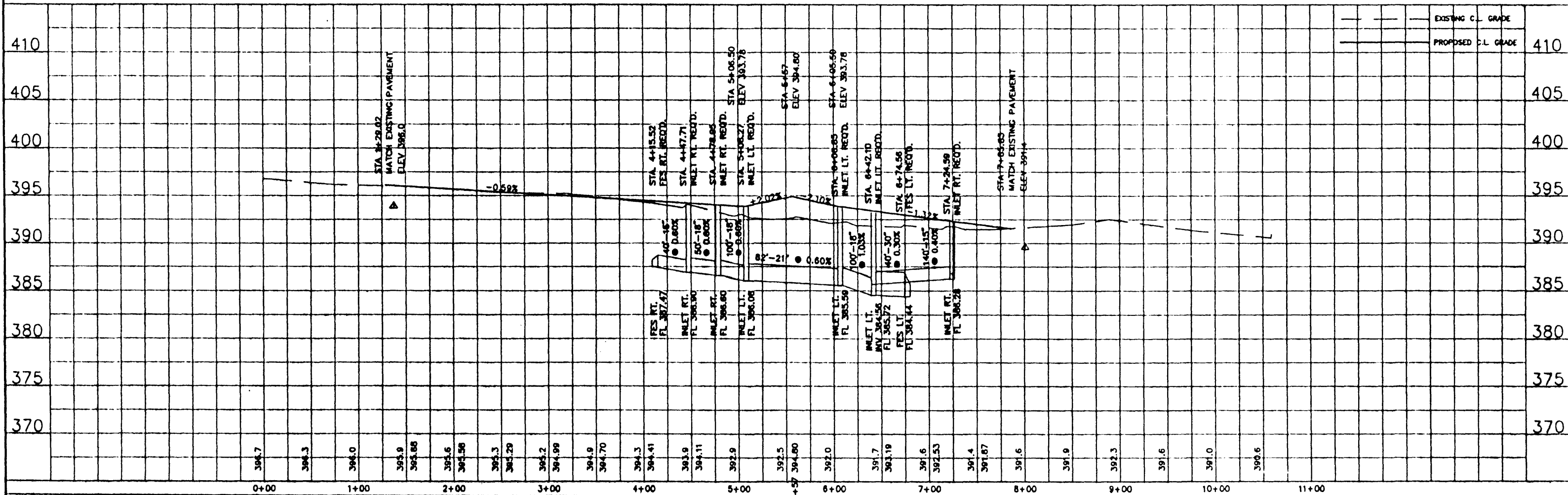
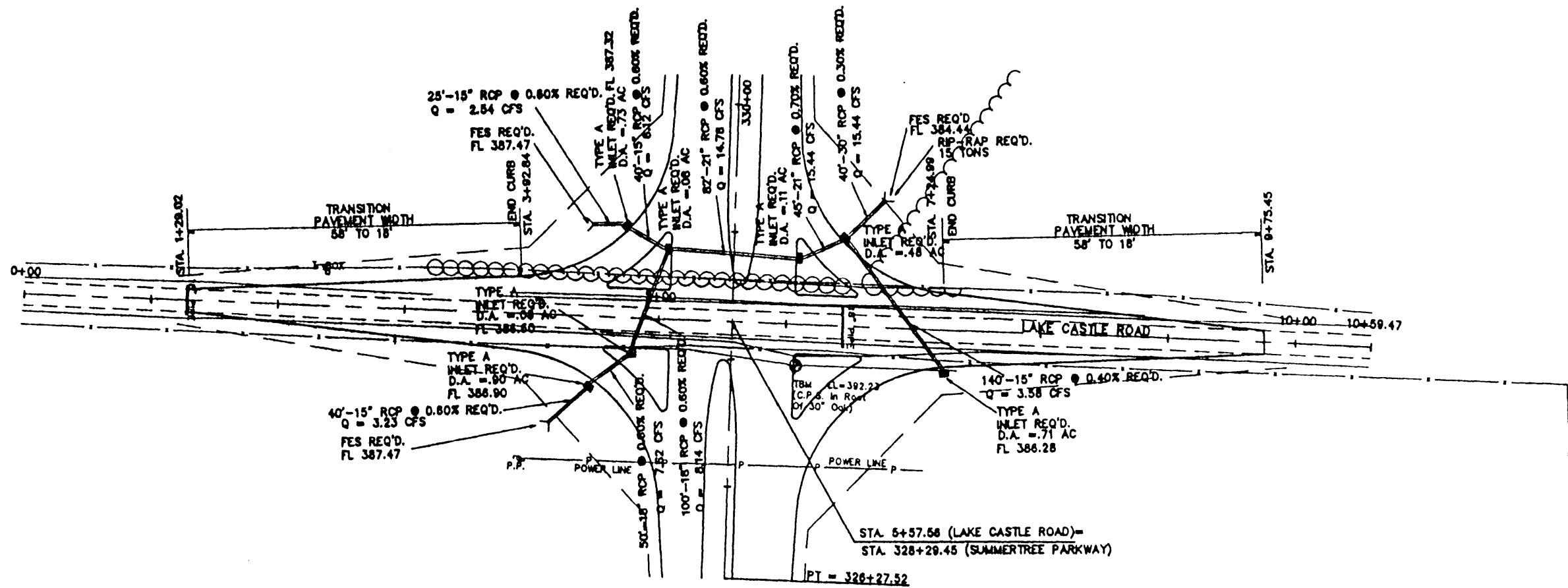
SUMMERTREE PARKWAY

ACAD PATH ROUTE	SHEET NO.
0. VARIOUS SUMMERTREE APPROX	32 of 82

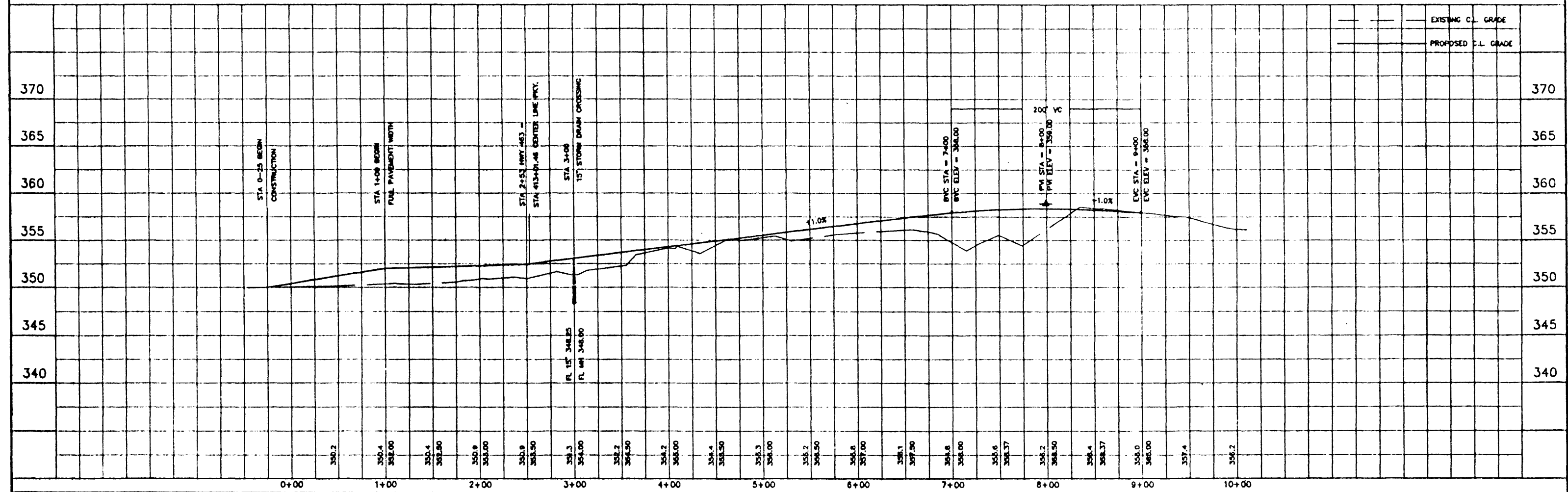
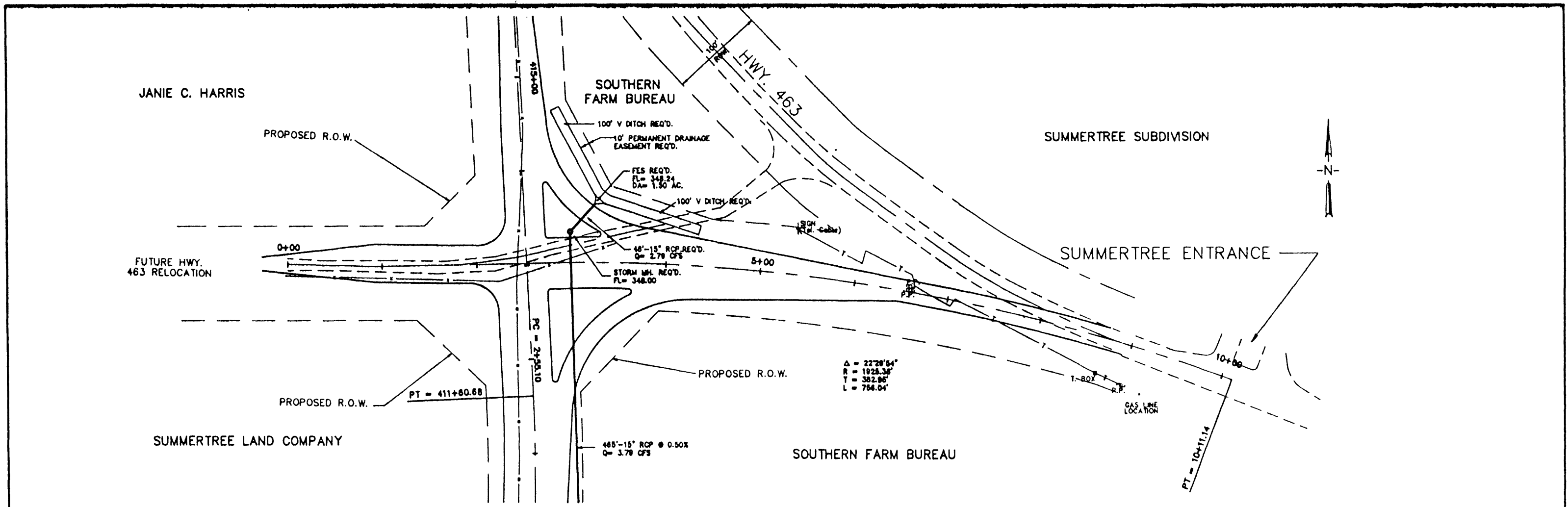
GENERAL NOTE:
12" WATER MAIN AND 8" FORCE MAIN SHALL HAVE A 36" MIN. COVER



Station	Proposed C.L. Grade	Existing C.L. Grade
0+00	360.9	
0+10	361.6	
0+20	362.3	
0+30	362.07	
0+40	363.2	
0+50	362.33	
0+60	364.2	
0+70	362.59	
0+80	365.2	
0+90	362.78	
1+00	366.0	
1+10	362.67	
1+20	367.2	
1+30	362.18	
1+40	368.1	
1+50	361.77	
1+60	364.0	
1+70	361.30	
1+80	361.05	
1+90	361.5	
2+00	361.70	
2+10	359.8	
2+20	361.05	
2+30	358.5	
2+40	360.70	
2+50	358.9	
2+60	360.45	
2+70	358.6	
2+80	360.24	
2+90	358.3	
3+00	360.02	
3+10	359.2	
3+20	359.81	
3+30	359.3	
3+40	359.60	
3+50	358.3	
3+60	360.45	
3+70	359.1	
3+80	359.38	
3+90	358.9	



DESIGNED	DATE	WAGONER ENGINEERING INC. CONSULTING ENGINEERS JACKSON / BRANDON, MISSISSIPPI	SUMMERTREE PARKWAY	ACAD PATH ROUTE 6 SUMMERTREE PARKWAY
BY	11-13-88			
NO. DATE	REVISIONS	SHEET NO. 34 of 82		

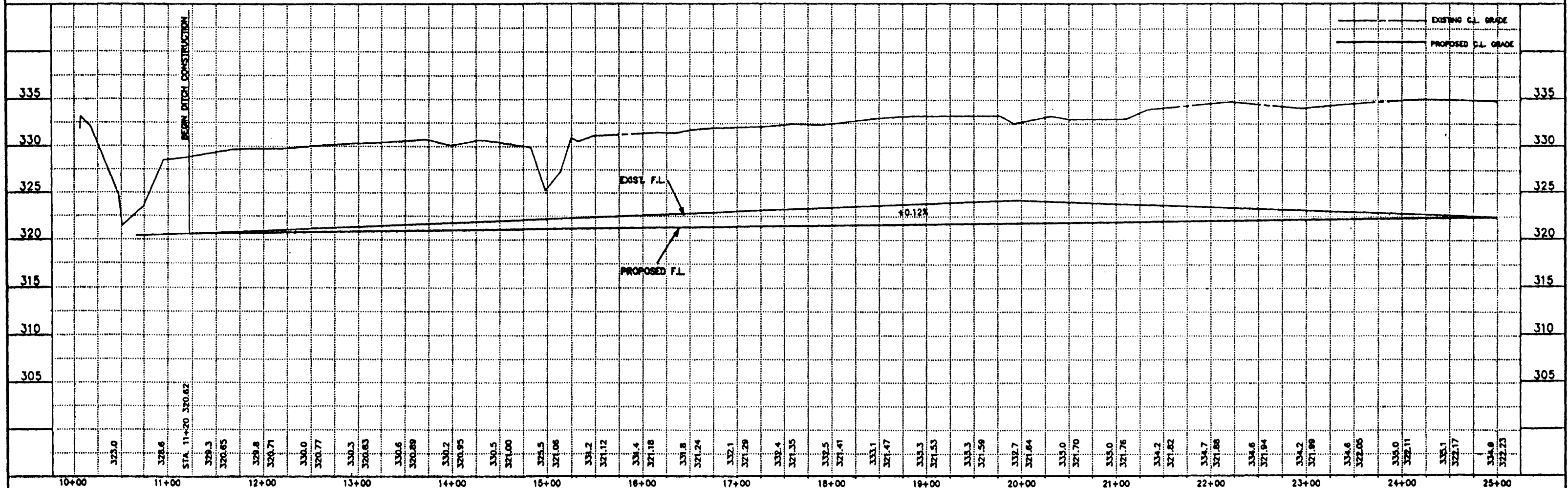
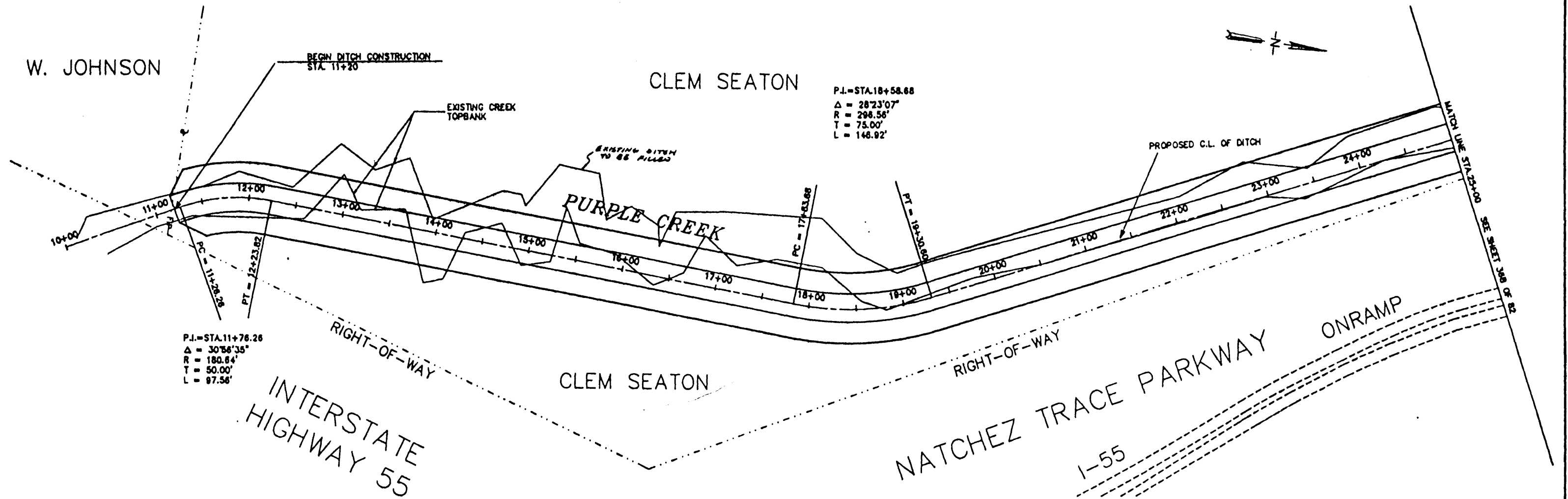
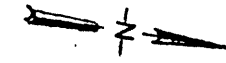


NO.	DATE	REVISIONS	BY	DESIGNED	DATE	SCALE	WAGGONER ENGINEERING INC. - CONSULTING ENGINEERS JACKSON / BRANDON, MISSISSIPPI	ACAD PATH ROUTE SUMMERTREE PARKWAY	W.E.L. JOB NO. 88-143	SHEET NO. 35 of 82
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W. JOHNSON

CLEM SEATON

P.I. = STA. 18+58.88
 $\Delta = 28^{\circ}23'07''$
 $R = 296.56'$
 $T = 75.00'$
 $L = 146.92'$

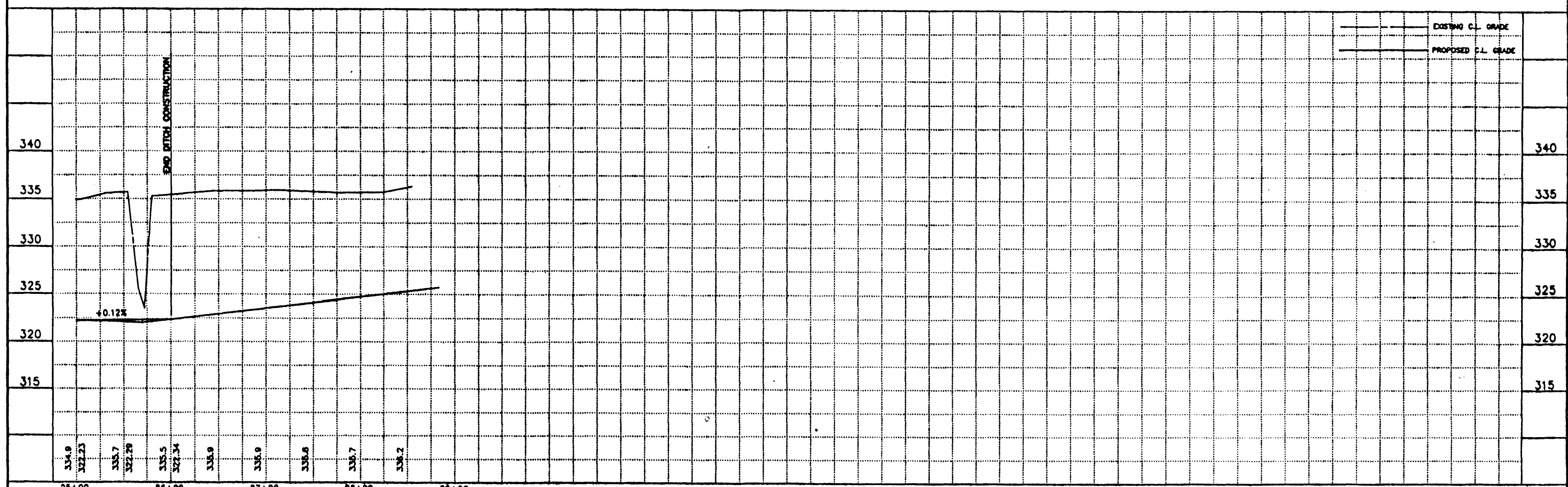
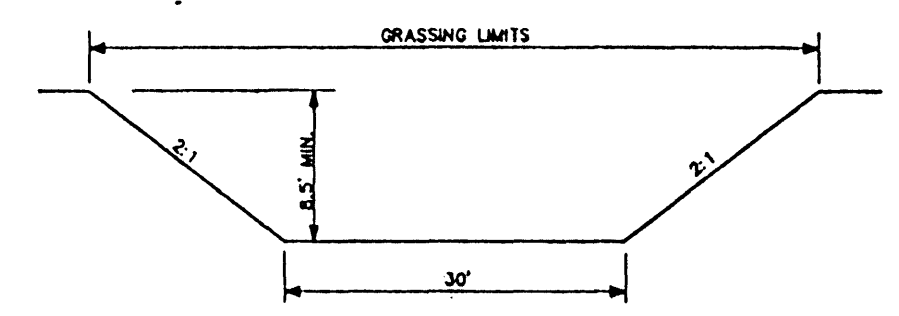
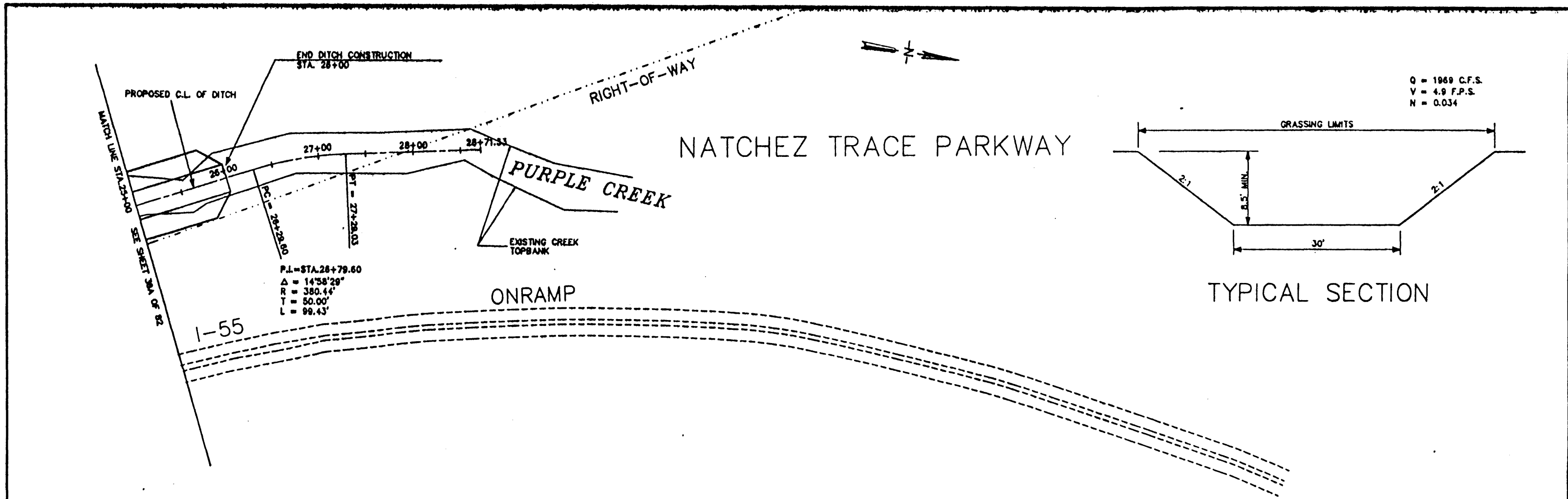


NO.	DATE	REVISIONS	DESIGNED	DATE	BY	DRAM	DATE	BY

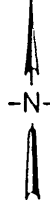
WAGGONER ENGINEERING INC. CONSULTING ENGINEERS
 JACKSON, MISSISSIPPI

SUMMERTREE PARKWAY
 PURPLE CREEK CHANNELIZATION

ACAD. PATH ROUTE
 C:\DWG\PLANVIEW\PROO11
 W.E.L. JOB NO. 88-103 SHEET NO. 36A OF 82



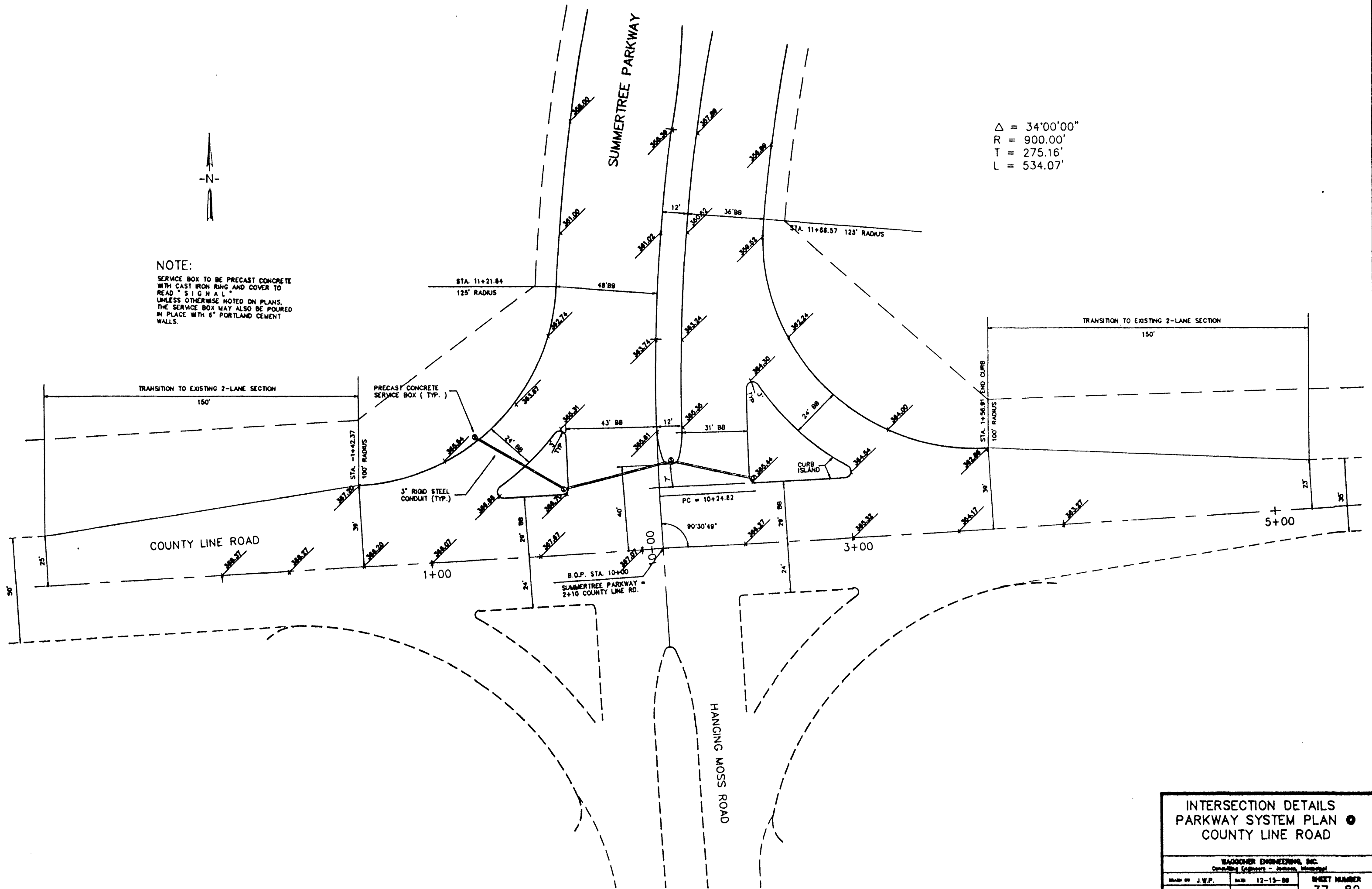
DESIGNED	DATE	WAGGONER ENGINEERING INC. CONSULTING ENGINEERS JACKSON, MISSISSIPPI	SUMMERTREE PARKWAY PURPLE CREEK CHANNELIZATION	ACAD PATH ROUTE C:\DWG\SUMTREE\APPROCH1	SHEET NO. 36B of 82
DRAWN	DATE				
NO. DATE	REVISIONS	BY		W.E.I. JOB NO. 88-103	



NOTE:

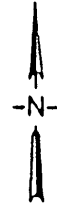
SERVICE BOX TO BE PRECAST CONCRETE WITH CAST IRON RING AND COVER TO READ "SIGNAL". UNLESS OTHERWISE NOTED ON PLANS, THE SERVICE BOX MAY ALSO BE POURED IN PLACE WITH 6" PORTLAND CEMENT WALLS.

$\Delta = 34'00'00''$
 $R = 900.00'$
 $T = 275.16'$
 $L = 534.07'$



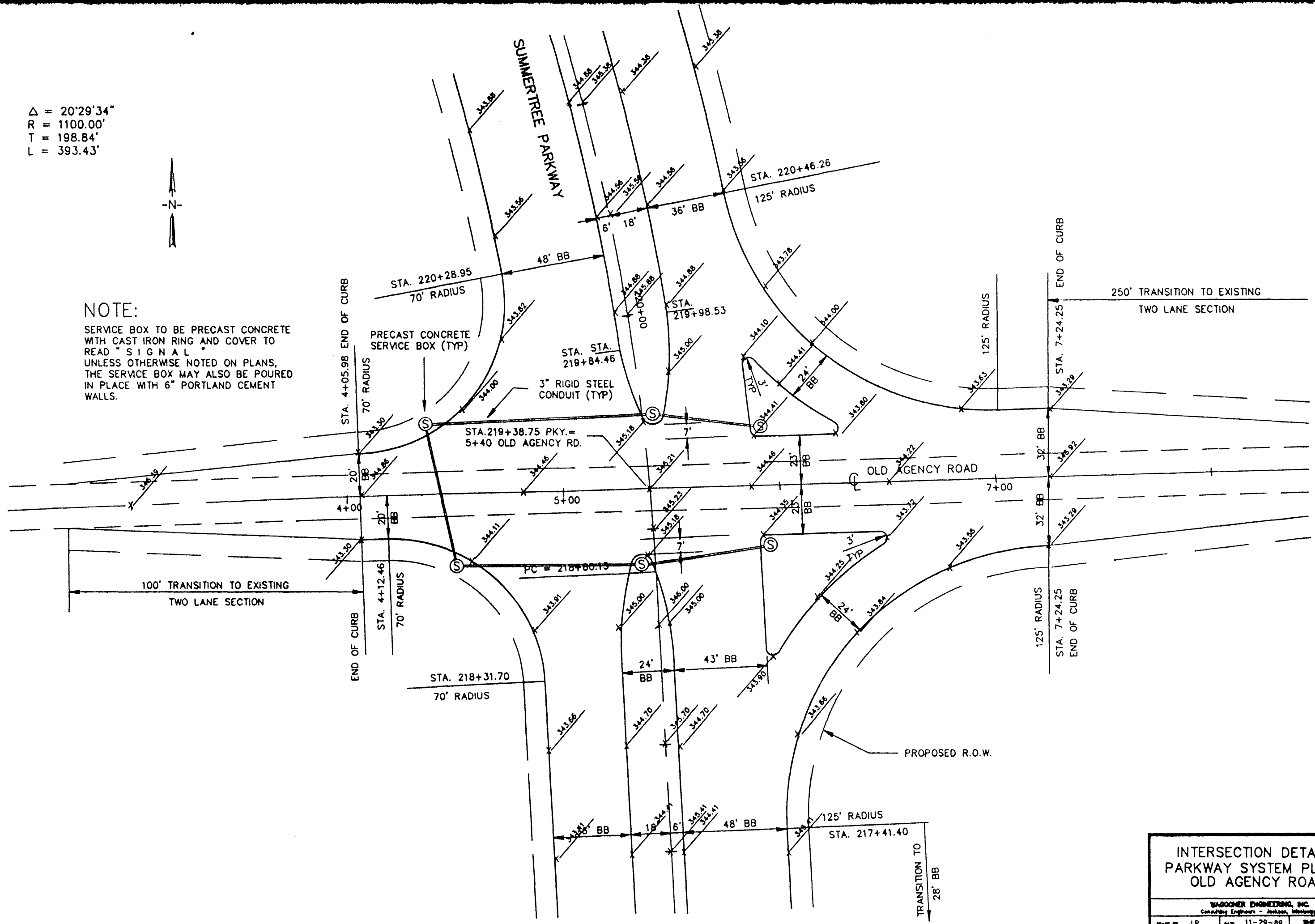
INTERSECTION DETAILS PARKWAY SYSTEM PLAN COUNTY LINE ROAD		
<small>WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi</small>		
<small>DESIGNED BY</small> J.W.P.	<small>DATE</small> 12-19-88	<small>SHEET NUMBER</small>
<small>DRAWN BY</small>	<small>SCALE</small> 1" = 20'	37 of 82

$\Delta = 20'29'34''$
 $R = 1100.00'$
 $T = 198.84'$
 $L = 393.43'$



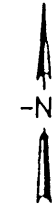
NOTE:

SERVICE BOX TO BE PRECAST CONCRETE WITH CAST IRON RING AND COVER TO READ "SIGNAL". UNLESS OTHERWISE NOTED ON PLANS, THE SERVICE BOX MAY ALSO BE POURED IN PLACE WITH 6" PORTLAND CEMENT WALLS.

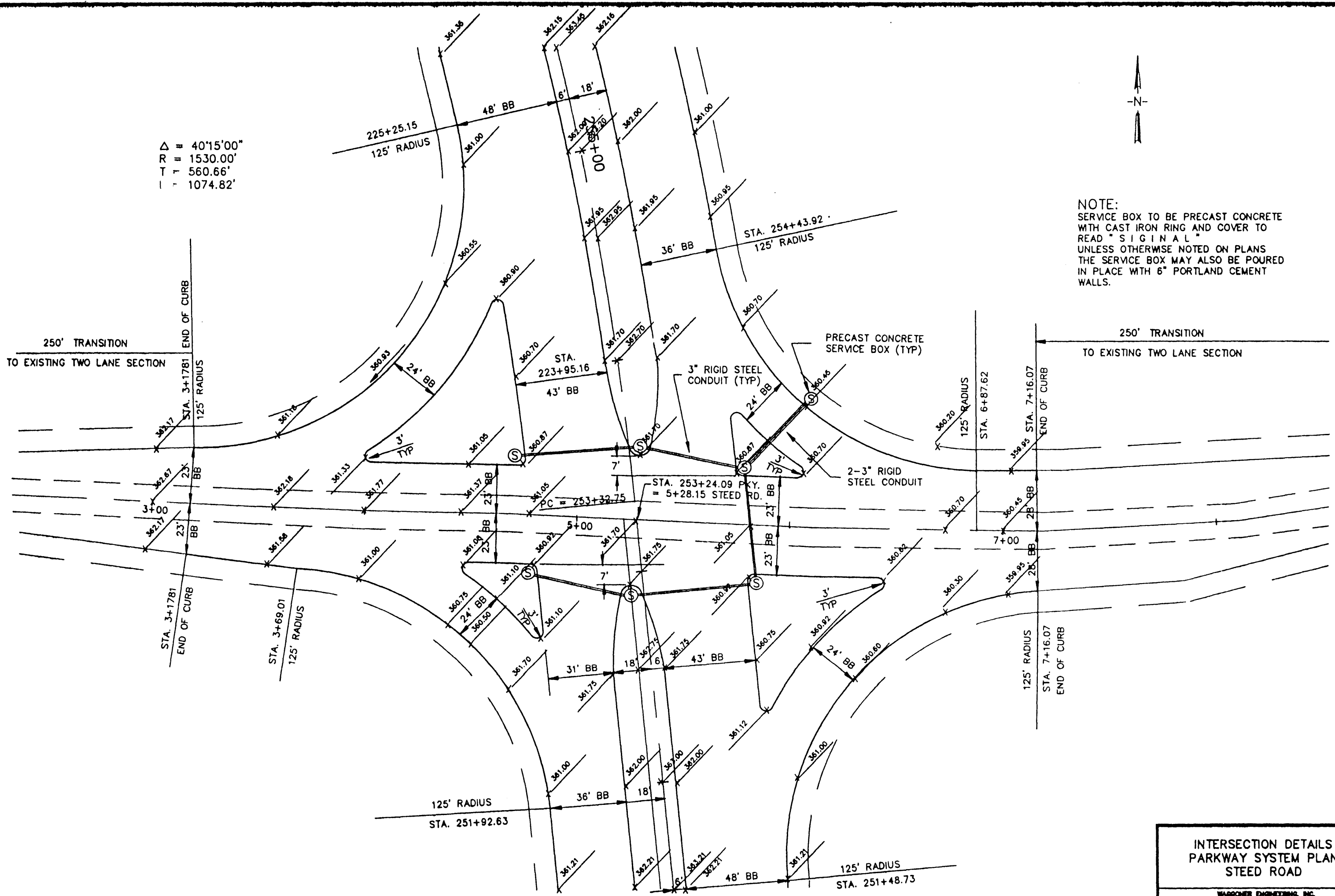


INTERSECTION DETAILS PARKWAY SYSTEM PLAN		
OLD AGENCY ROAD		
<small>WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi</small>		
<small>DRAWN BY</small> J.P.	<small>DATE</small> 11-29-89	<small>SHEET NUMBER</small>
<small>CHECKED BY</small>	<small>SCALE</small> 1"=20'	38 of 82

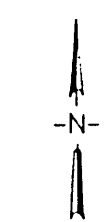
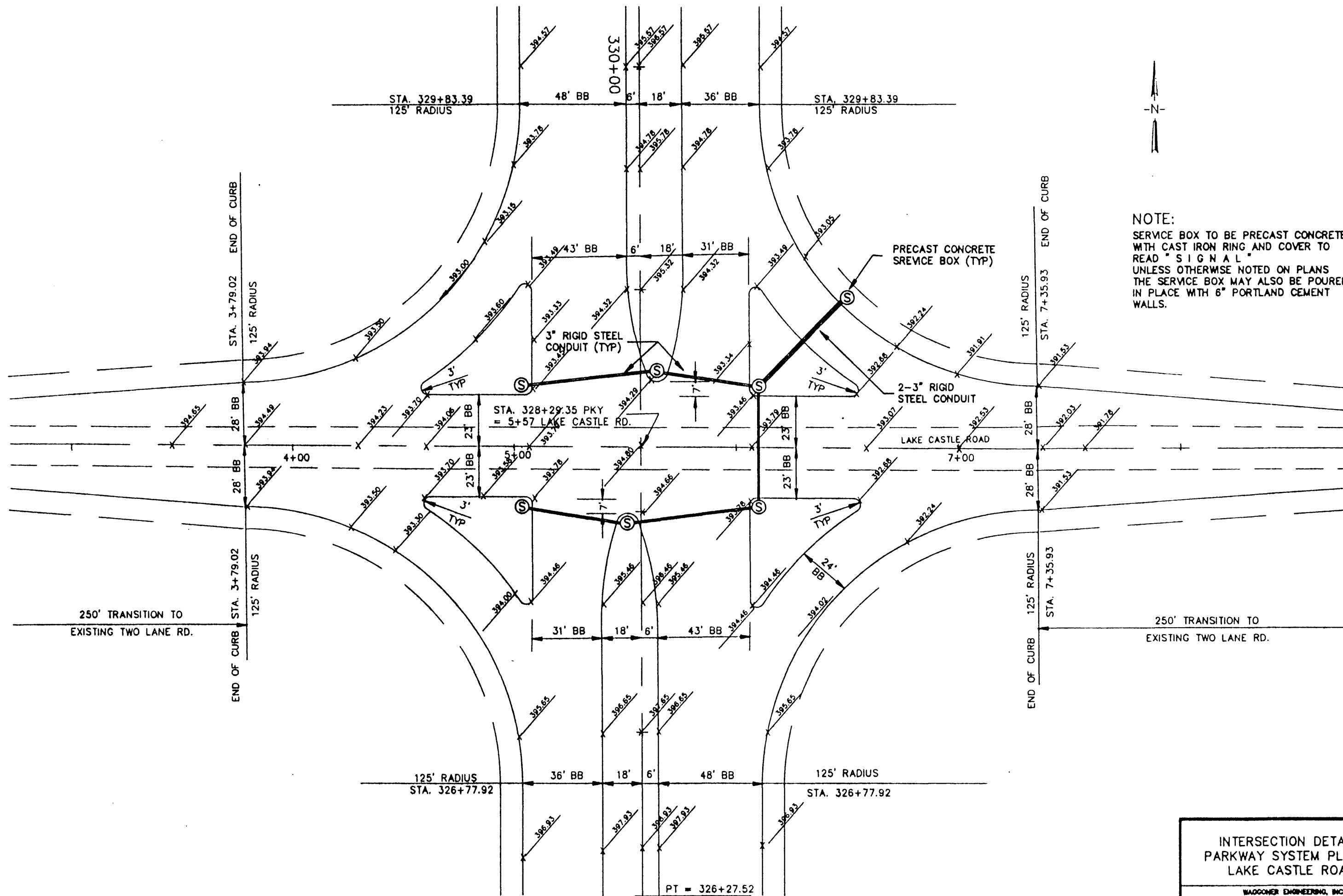
$\Delta = 40'15''00''$
 $R = 1530.00'$
 $T = 560.66'$
 $L = 1074.82'$



NOTE:
 SERVICE BOX TO BE PRECAST CONCRETE
 WITH CAST IRON RING AND COVER TO
 READ " S I G N A L "
 UNLESS OTHERWISE NOTED ON PLANS
 THE SERVICE BOX MAY ALSO BE POURED
 IN PLACE WITH 6" PORTLAND CEMENT
 WALLS.



INTERSECTION DETAILS		
PARKWAY SYSTEM PLAN		
STEED ROAD		
<small>WAGGONER ENGINEERING, INC.</small>		
<small>Consulting Engineers - Jackson, Mississippi</small>		
<small>DESIGNED BY</small>	<small>DATE</small>	<small>SHEET NUMBER</small>
J.P.	11-29-88	39 of 82
<small>CHECKED BY</small>	<small>SCALE</small>	
	1"=20'	

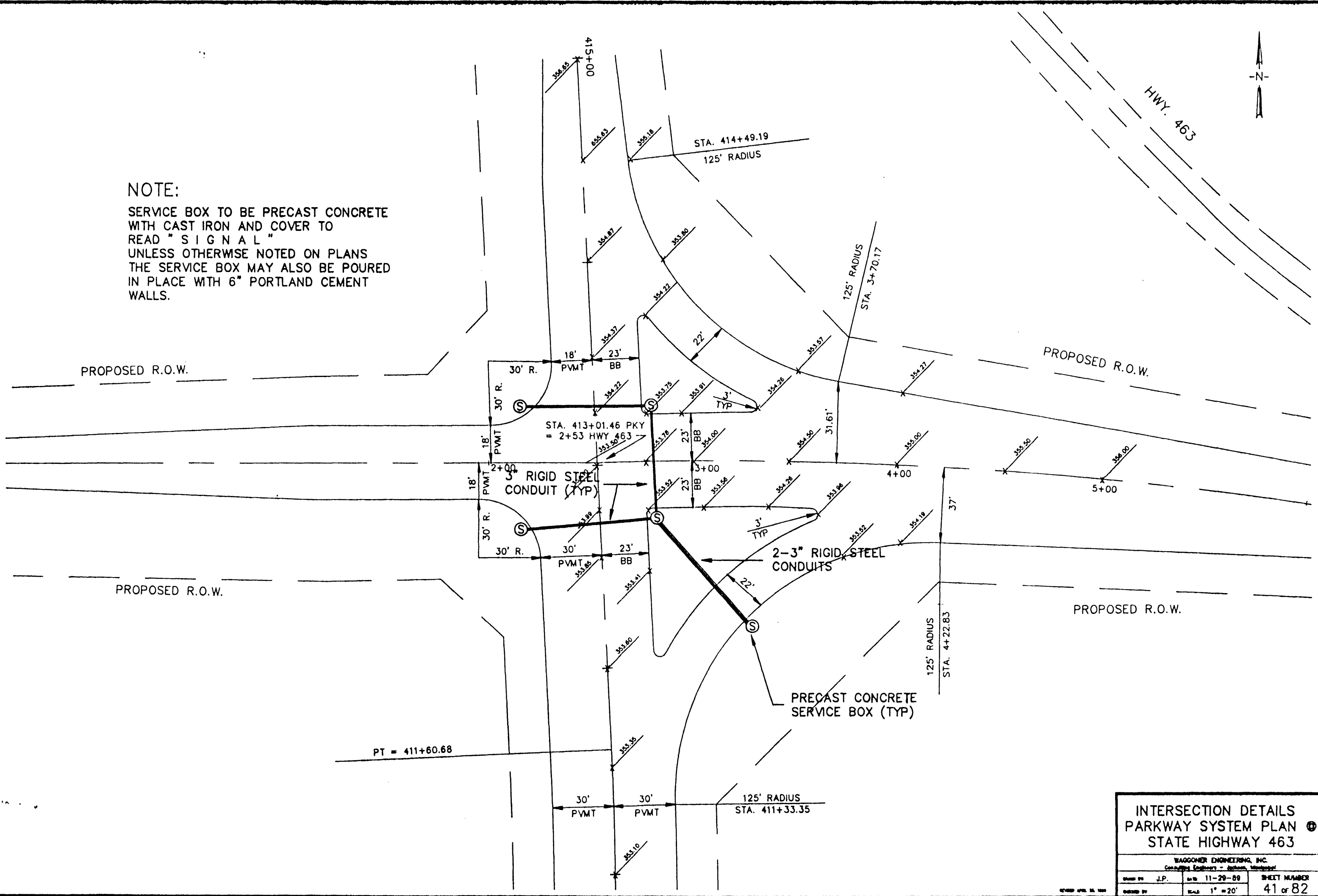
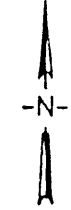


NOTE:
 SERVICE BOX TO BE PRECAST CONCRETE WITH CAST IRON RING AND COVER TO READ "SIGNAL"
 UNLESS OTHERWISE NOTED ON PLANS THE SERVICE BOX MAY ALSO BE POURED IN PLACE WITH 6" PORTLAND CEMENT WALLS.

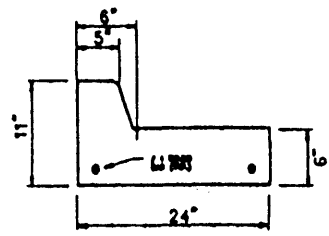
INTERSECTION DETAILS PARKWAY SYSTEM PLAN LAKE CASTLE ROAD		
<small>WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi</small>		
<small>DRAWN BY</small> J.P.	<small>DATE</small> 11-29-88	<small>SHEET NUMBER</small>
		40 of 82

NOTE:

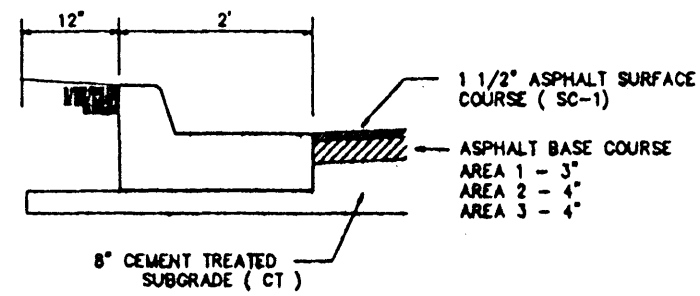
SERVICE BOX TO BE PRECAST CONCRETE WITH CAST IRON AND COVER TO READ " SIGNAL " UNLESS OTHERWISE NOTED ON PLANS THE SERVICE BOX MAY ALSO BE POURED IN PLACE WITH 6" PORTLAND CEMENT WALLS.



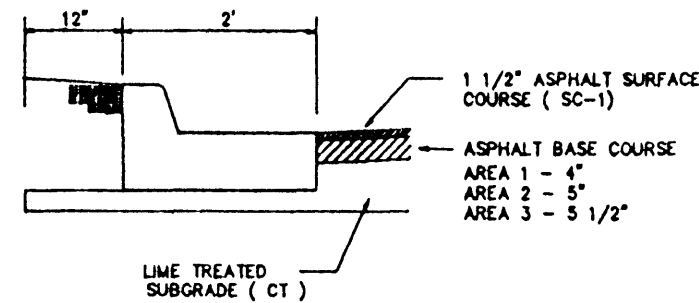
INTERSECTION DETAILS PARKWAY SYSTEM PLAN ① STATE HIGHWAY 463			
<small>WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi</small>			
DESIGNED BY	J.P.	DATE	11-29-89
CHECKED BY		SCALE	1" = 20'
			SHEET NUMBER 41 of 82



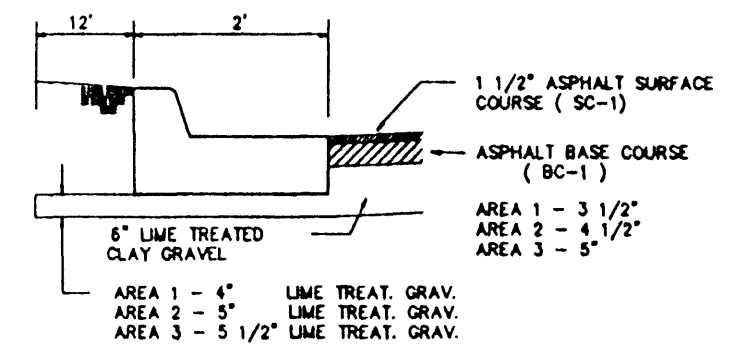
STANDARD CURB & GUTTER DETAIL



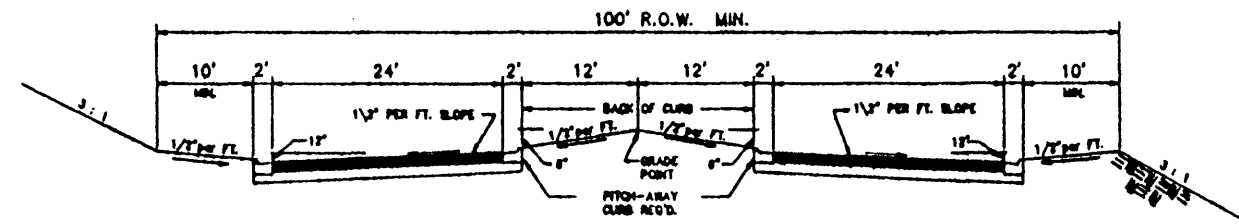
BASE BID
CEMENT TREATED SUBGRADE



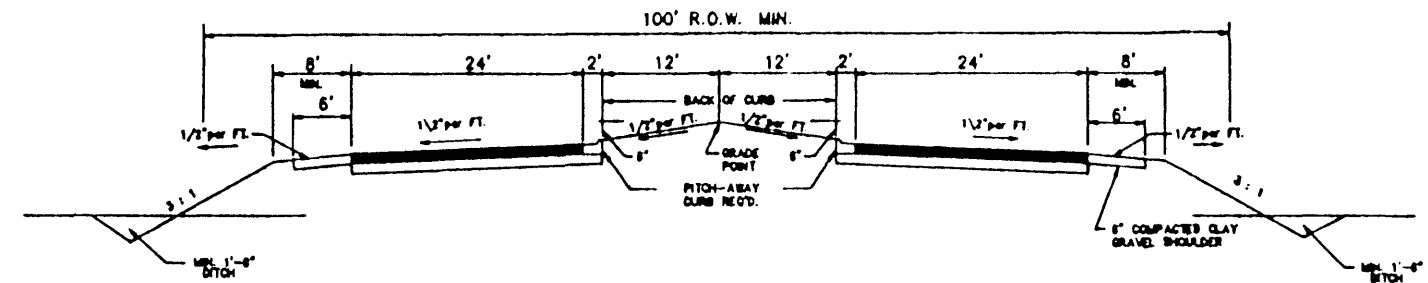
ALTERNATE 1
LIME MODIFIED SUBGRADE



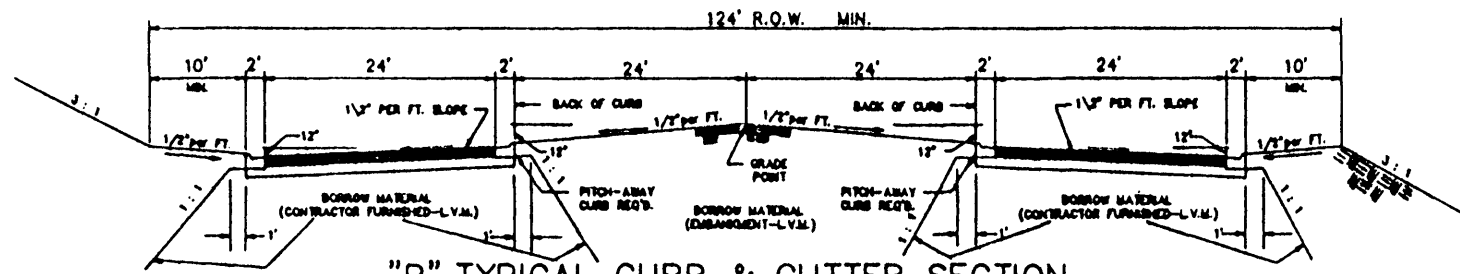
ALTERNATE 2
LIME TREATED CLAY GRAVEL SUBGRADE



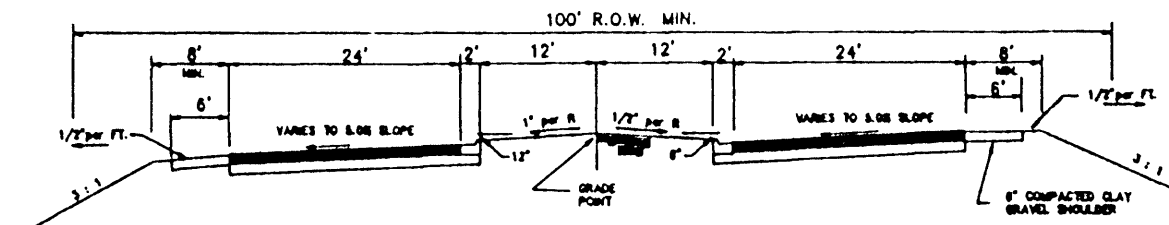
"A" TYPICAL CURB & GUTTER SECTION
N.T.S.



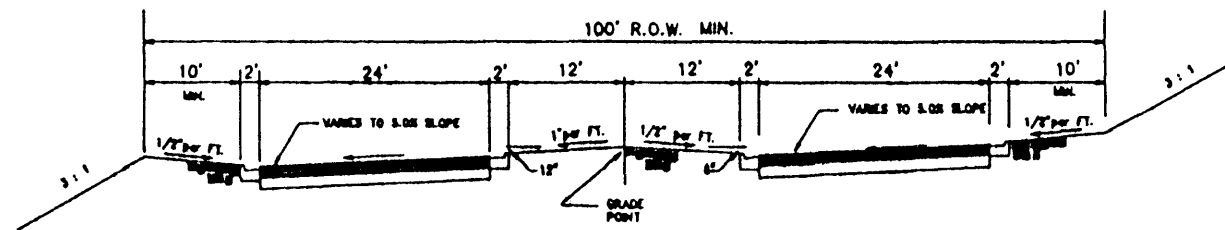
"D" FILL SECTION
N.T.S.



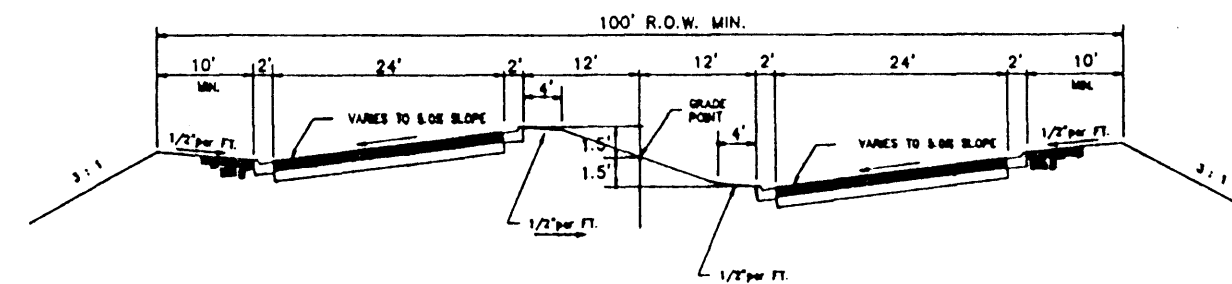
"B" TYPICAL CURB & GUTTER SECTION
N.T.S.



"E" FILL SUPERELEVATION SECTION
N.T.S.



"C" CURB & GUTTER SUPERELEVATION SECTION
N.T.S.



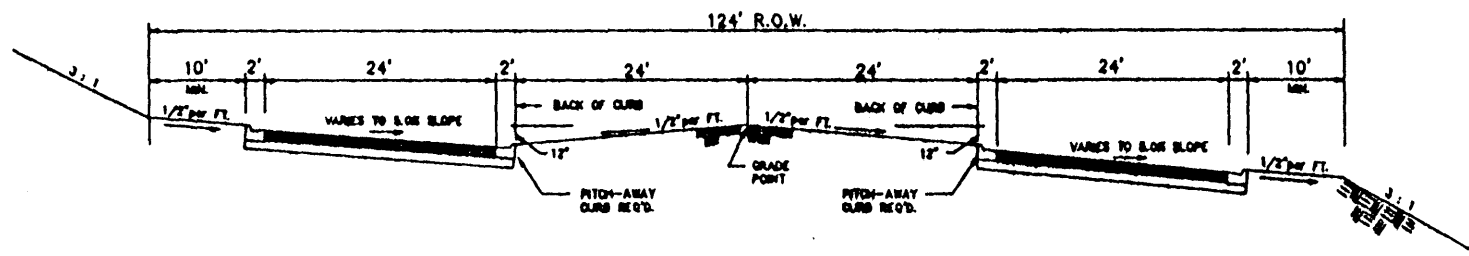
"G" SUPERELEVATION STEPPED SECTION
N.T.S.

- NOTE:
1. IF CURB POURED BY MACHINE, 3,000 PSI CONCRETE WILL BE REQUIRED.
 2. EROSION CONTROL LIMITS WILL BE AS INDICATED IN THE TECHNICAL SPECIFICATIONS.
 3. TWO # 6 SLIP DOWELS 24" LONG AT EXPANSION JOINTS. CURB TO BE POURED IN 30' SECTIONS. DUMMY JOINTS @ 10' CENTERS. CONCRETE SHALL BE 2500 PSI.

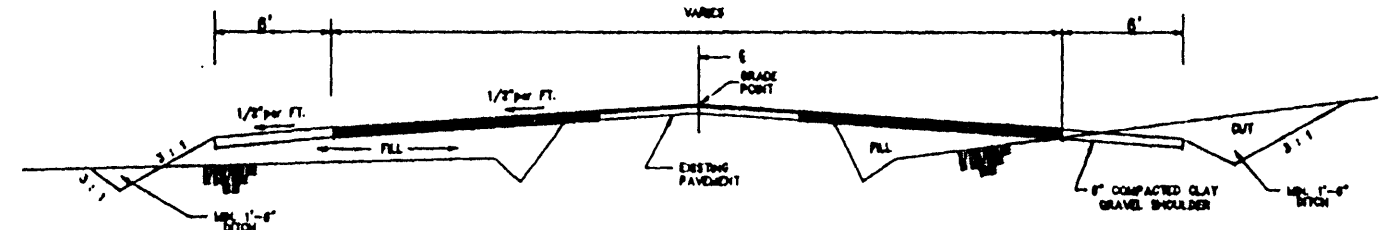
TYPICAL SECTIONS
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
Consulting Engineers - Architects - Planners

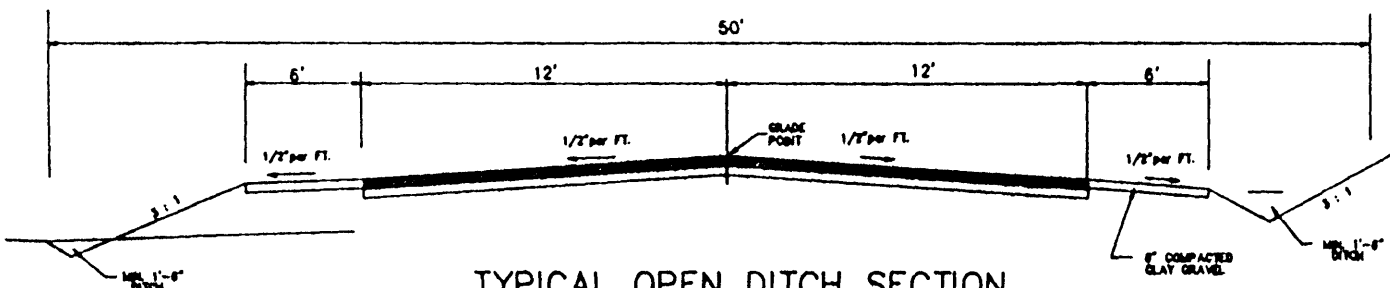
2	8-17-90	REVISE STANDARD CURB SECTION	DATE	12-19-88	SHEET NUMBER
1	1-16-90	ADD SELECT FILL AREA (TYP)	DESIGNED BY	J.V.P.	42 of 82
NO.	DATE	REVISION	DRAWN BY	N.T.S.	



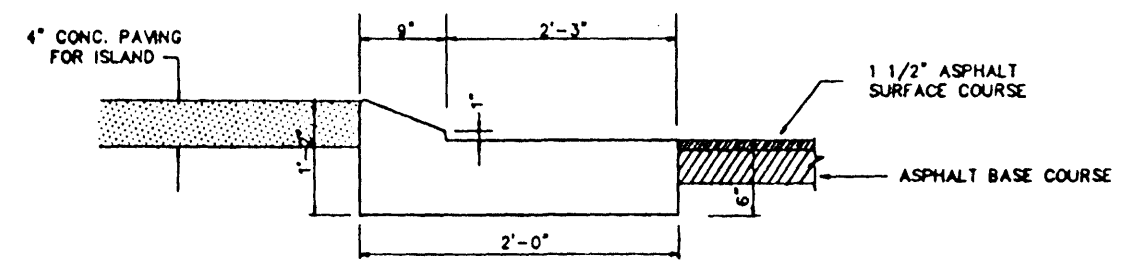
"H" CURB & GUTTER SUPERELEVATION SECTION
N.T.S.



TRANSITION SECTION
N.T.S.



TYPICAL OPEN DITCH SECTION
(COLE ROAD)
N.T.S.



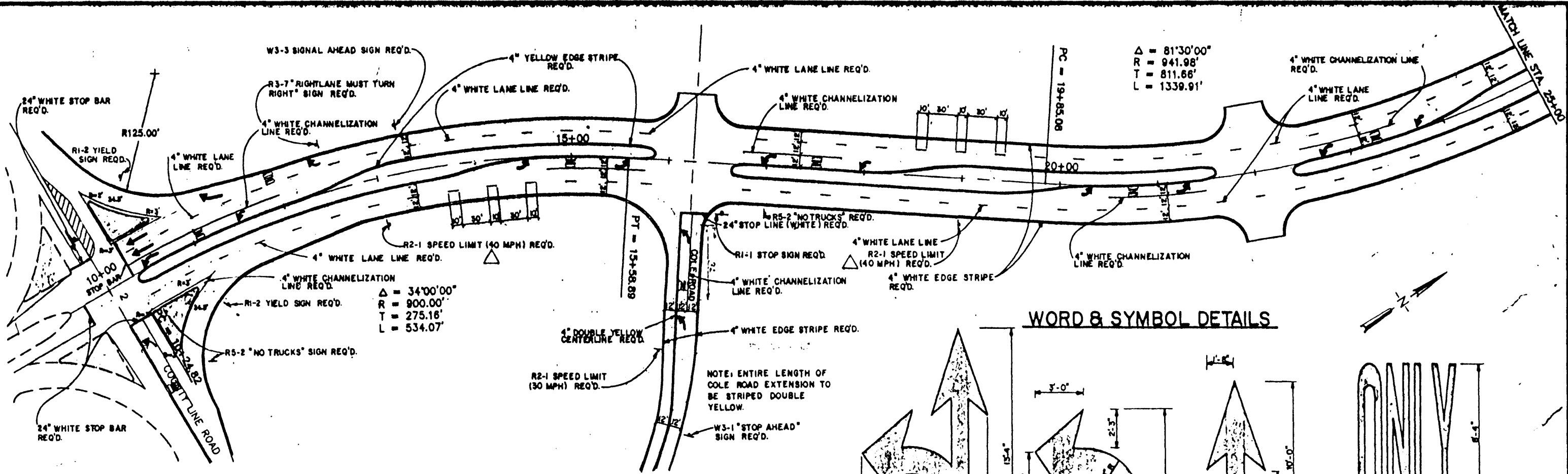
ISLAND
CURB DETAIL

TYPICAL SECTIONS
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
Consulting Engineers - Architects - Landscapers

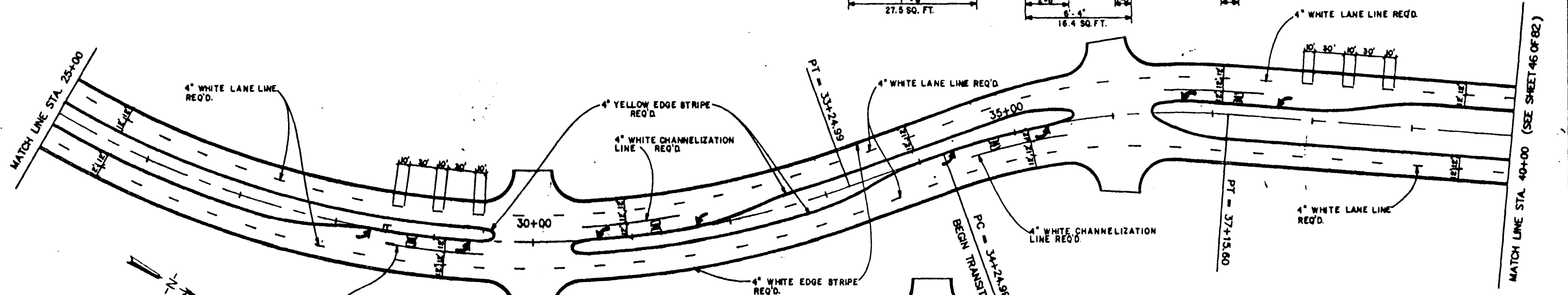
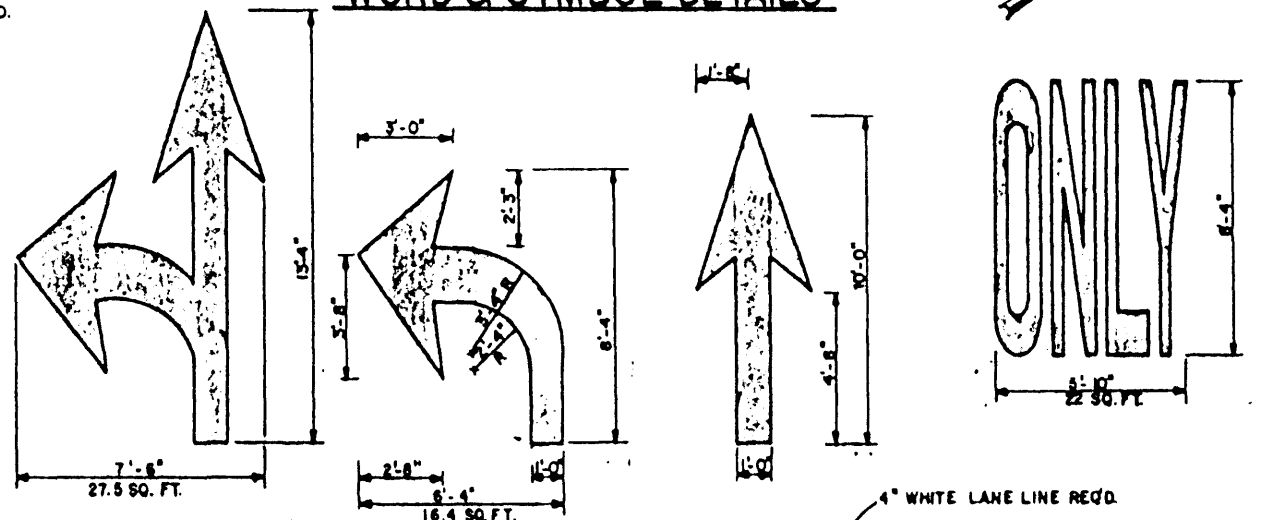
DATE BY	J.W.P.	DATE	12-18-89	SHEET NUMBER	43 of 82
DESIGNED BY		SCALE	N.T.S.		

BY DRAWING / PROJECT
7.14.89-10

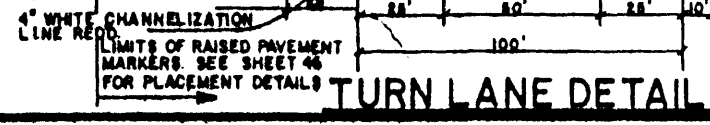


$\Delta = 34^{\circ}00'00''$
 $R = 900.00'$
 $T = 275.18'$
 $L = 534.07'$

WORD & SYMBOL DETAILS

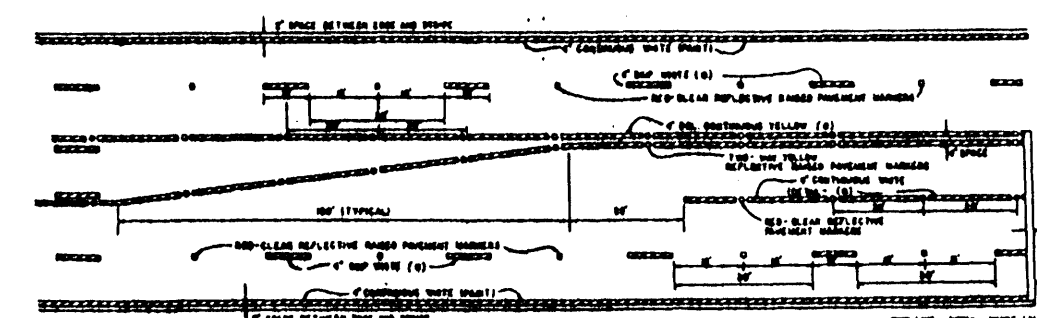
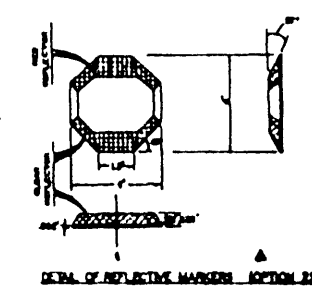
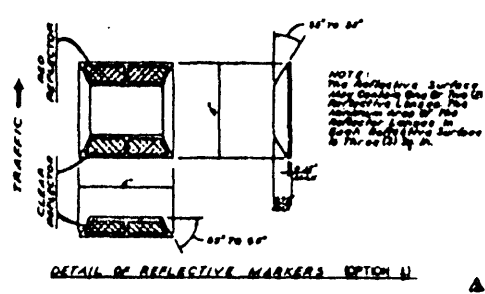
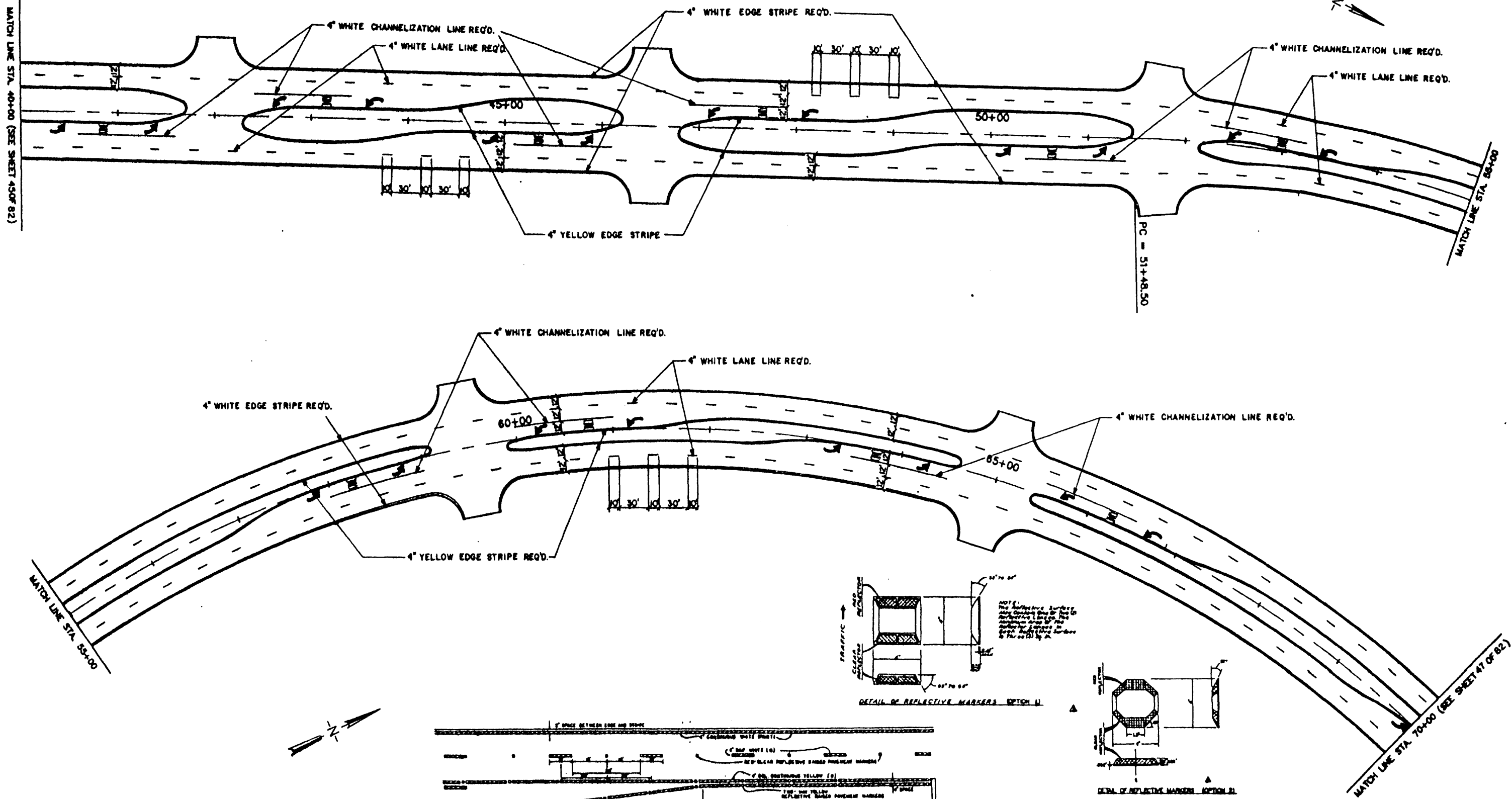


NOTE: RAISED PAVEMENT MARKERS REQUIRED AS INDICATED AT EACH INTERSECTION WHERE LEFT TURN LANES ARE PROVIDED.



LIMITS OF RAISED PAVEMENT MARKERS. SEE SHEET 46 FOR PLACEMENT DETAILS

3	9-27	CHANGED SPEED LIMIT TO 40 MPH	B.H.
2	9-27-90	CHANGED SPEED LIMIT	
1	8-8-90	Revised Striping At Intersection	
SIGNING & STRIPING PLAN			
SUMMERTREE PARKWAY			
WAGGONER ENGINEERING, INC.			
Civil Engineering - Surveying - Planning			
DATE	REVISED BY	REVISION	
1988-09-27	C.R.H.	CHANGED SPEED LIMIT	
1988-08-08	C.R.H.	Revised Striping At Intersection	
SHEET NUMBER			45 of 82



SPACING OF BASED REFLECTIVE MARKERS

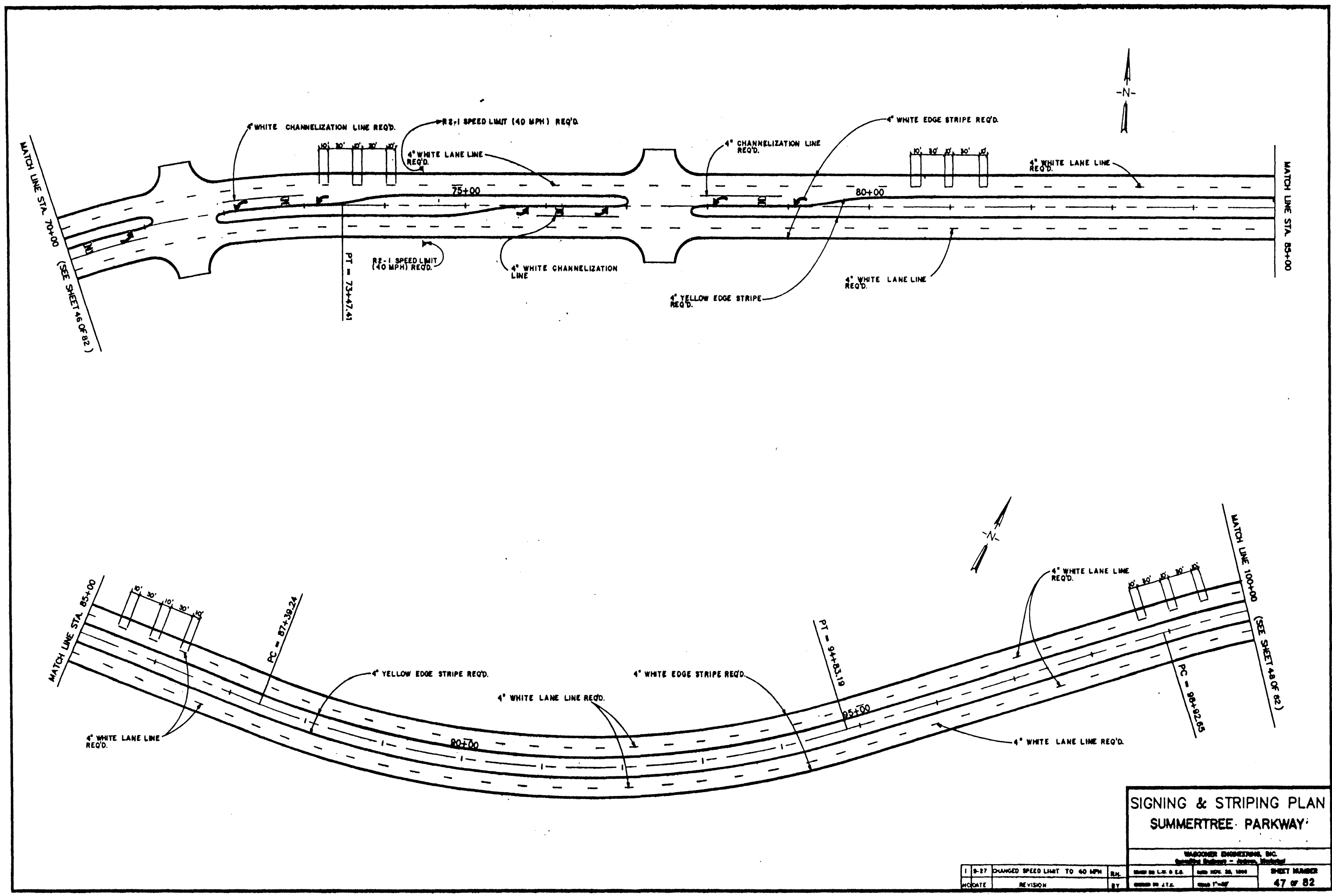
SECTION	SPACING	MARKER TYPE
TANGENT SECTIONS	40 FT	30 FT
HORIZONTAL CURVES	40 FT	40 FT
INTERCHANGE LIMITS	40 FT	40 FT

ON THE MAIN ROUTE, CLEAR-RED MARKERS ON 40 FT SPACING WILL BE REQUIRED ON LANE LINE (1) THROUGH ALL INTERCHANGE AREAS BEGINNING 500 FT IN ADVANCE IN DIRECTION OF TRAFFIC OF THE EXIT RAMP UNDER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP UNDER.

** HIGH PERFORMANCE MATERIAL REQUIRED AS INDICATED IN THE PW ITEMS.

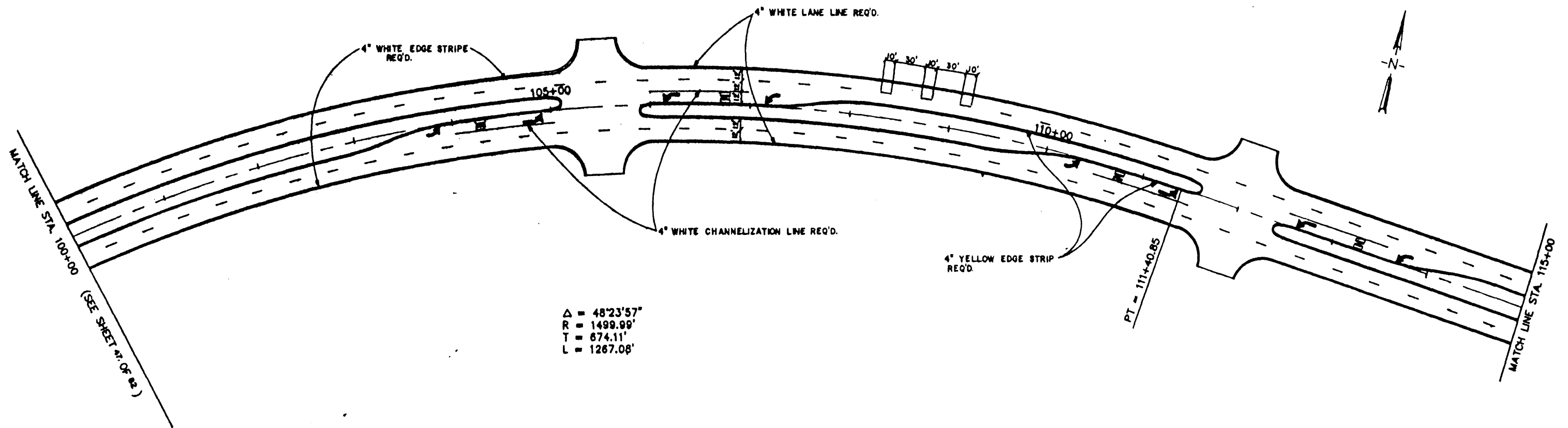
SIGNING & STRIPING PLAN SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi			
DESIGNED BY L.V. G.E.S.	DATE NOV. 28, 1988	CHECKED BY J.L.L.	SHEET NUMBER 46 of 82
DATE	REVISION	BY	
	1 5-87 CHANGED SPEED LIMIT TO 40 MPH	R.H.	



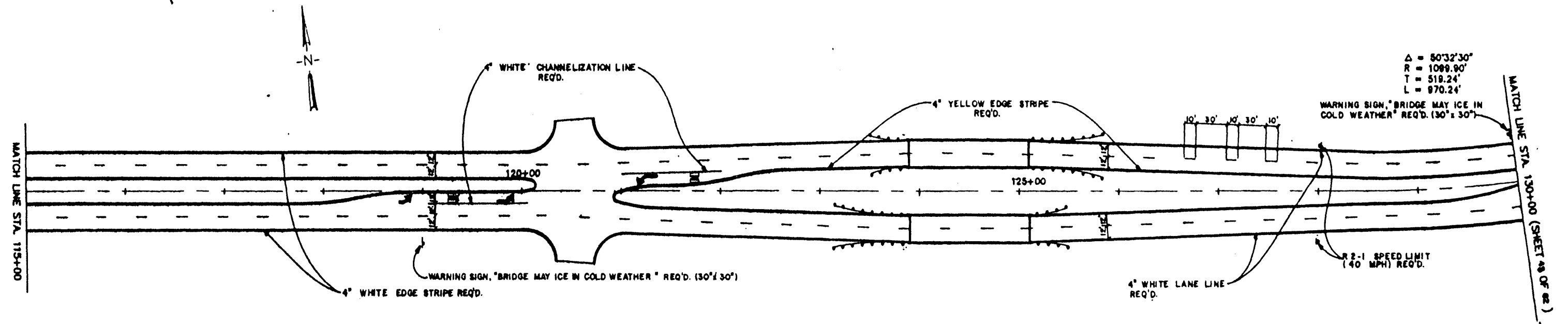
**SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY**

WAGGONER ENGINEERING, INC. Specialty Engineers - Survey, Structural			
1	8-27	CHANGED SPEED LIMIT TO 40 MPH	BY: [Signature]
DATE	REVISION	BY	DATE
			8/27/87
SHEET NUMBER			47 OF 82



$\Delta = 48^{\circ}23'57''$
 $R = 1499.99'$
 $T = 674.11'$
 $L = 1267.08'$

PT. = 111+40.85



$\Delta = 50^{\circ}32'30''$
 $R = 1099.90'$
 $T = 519.24'$
 $L = 970.24'$

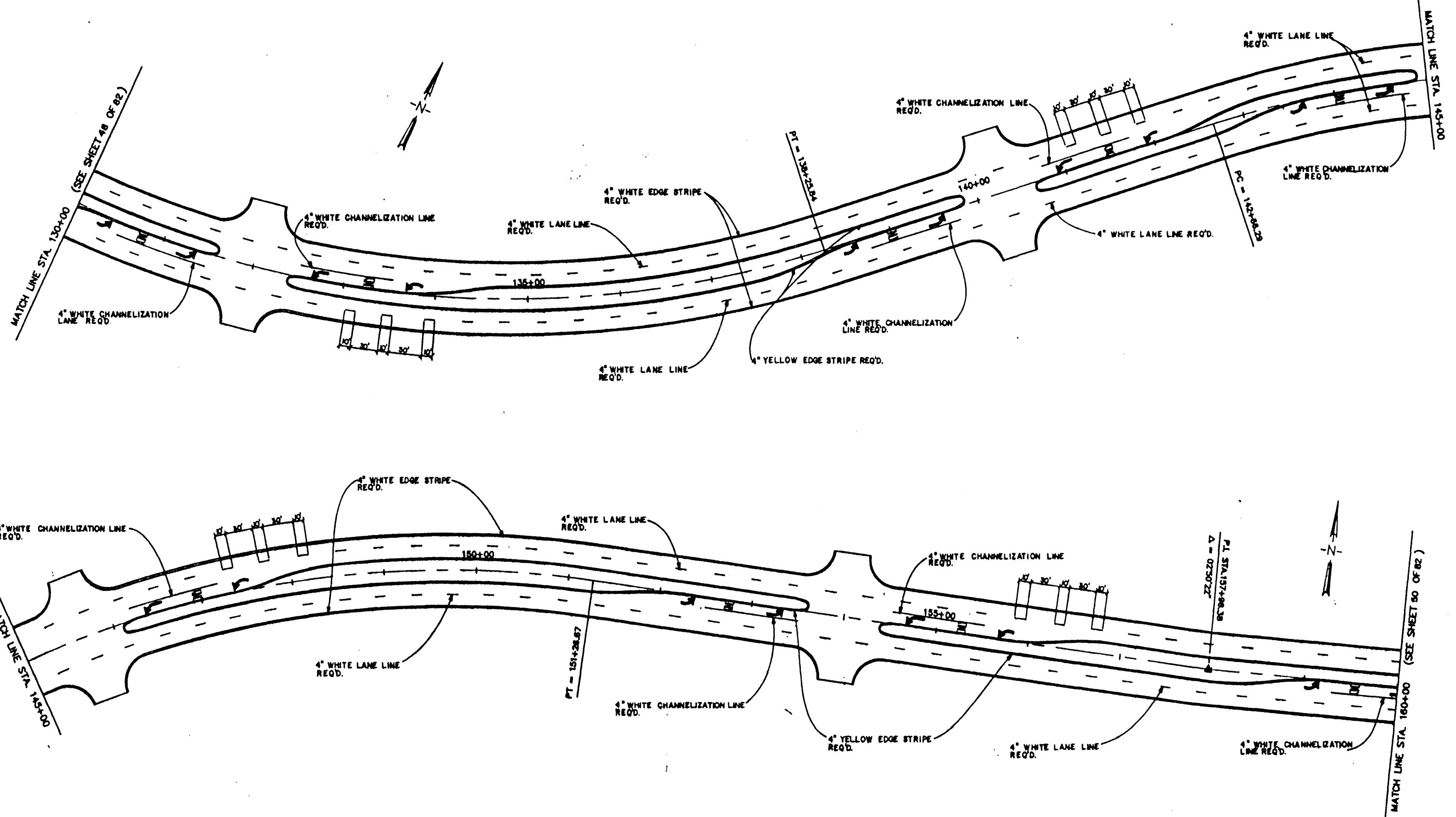
WARNING SIGN, "BRIDGE MAY ICE IN COLD WEATHER" REQ'D. (30" x 30")

R 2-1 SPEED LIMIT (40 MPH) REQ'D.

**SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY**

WAGGNER ENGINEERING, INC.
Civil/Structural Engineers - Architects - Planners

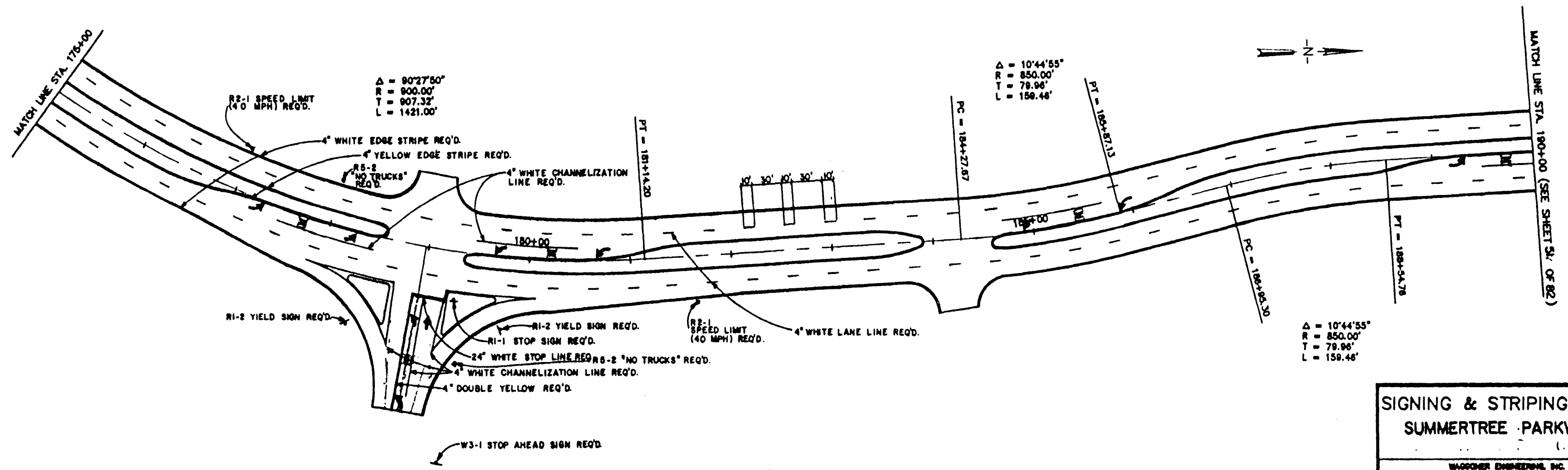
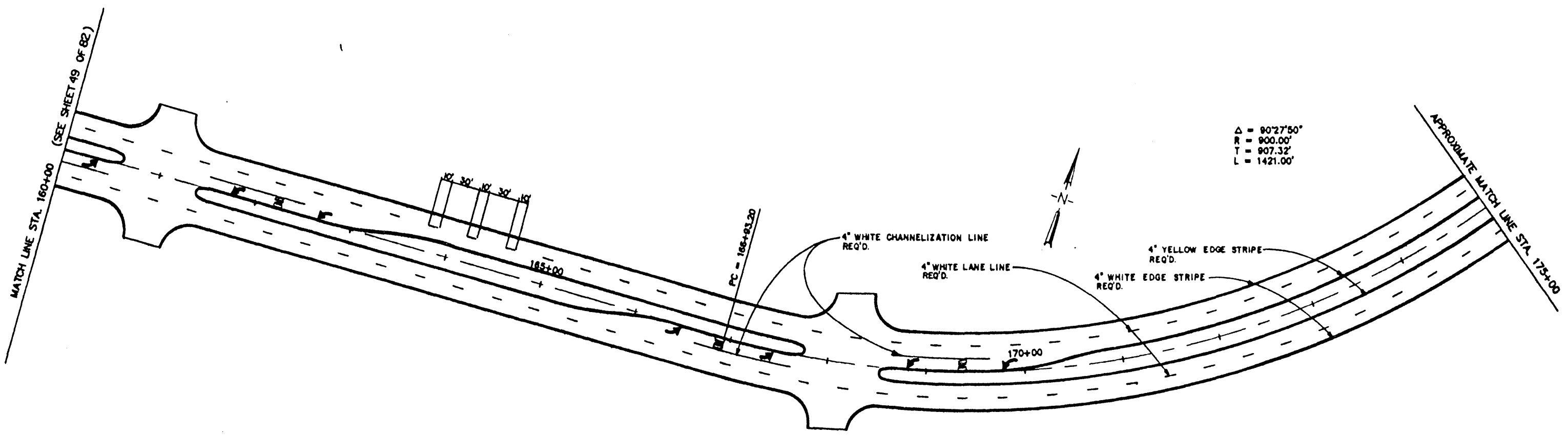
1	9-27	CHANGED SPEED LIMIT TO 40 MPH	ELK	ISSUED BY L.W.B.L.C.	DATE NOV. 24, 1999	SHEET NUMBER
			BY	DESIGNED BY JTK	SCALE 1"=50'	48 OF 82



**SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY**

WAGGONER ENGINEERING, INC.
 Registered Engineers - Indiana, Michigan

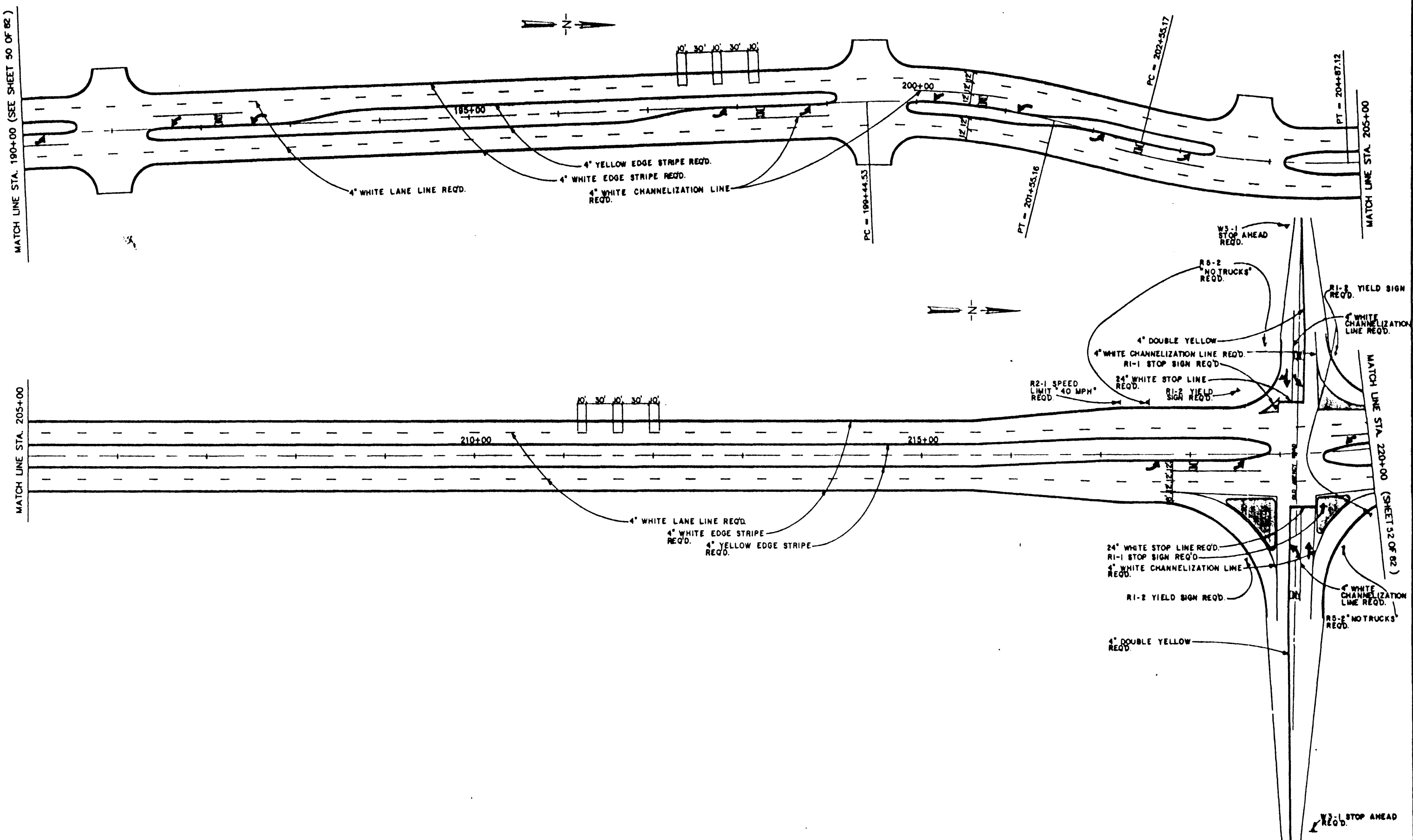
NO.	DATE	REVISION	BY	CHANGED BY L.V.E.C.	DATE	NO. OF SHEETS	SHEET NUMBER
1	9-27	CHANGED SPEED LIMIT TO 40 MPH	R.H.		10/11/82	49	82



SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Mississippi

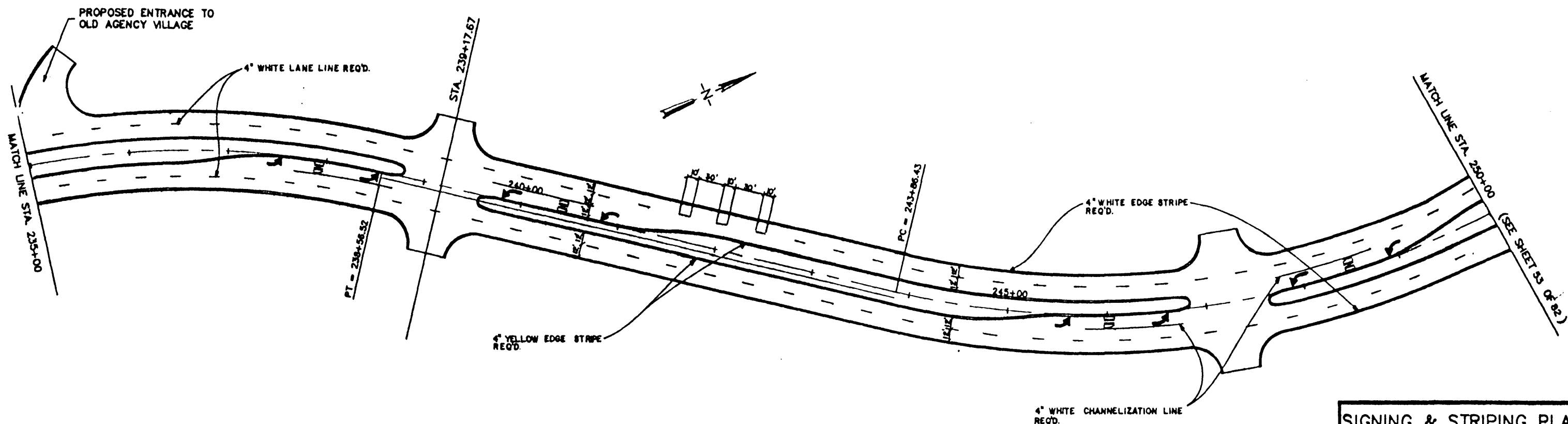
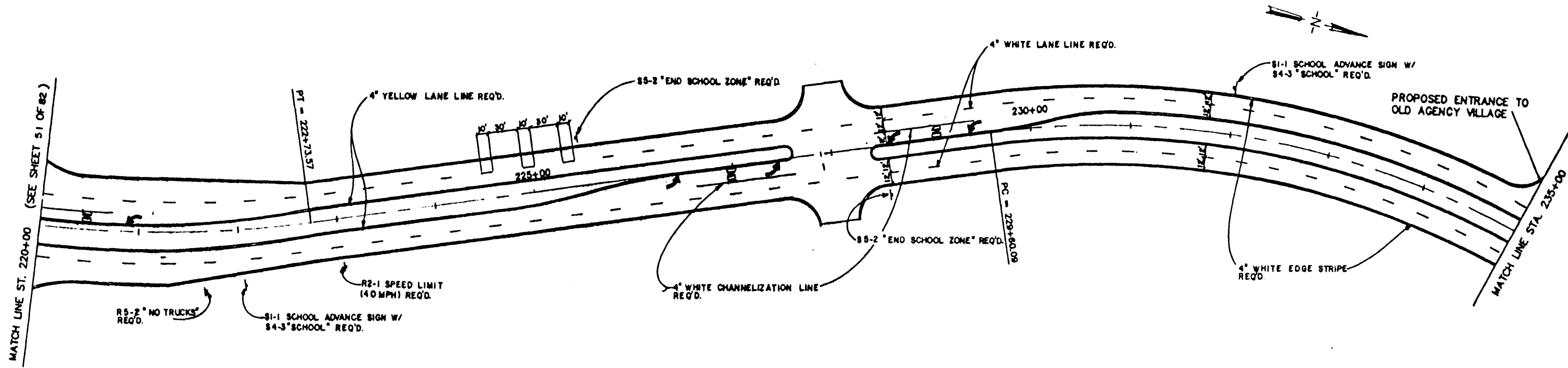
NO.	DATE	REVISION	BY	SCALE	SHEET NUMBER
1	9-27	CHANGED SPEED LIMIT TO 40 MPH	RJK	1" = 20'	50 OF 82



SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Mississippi

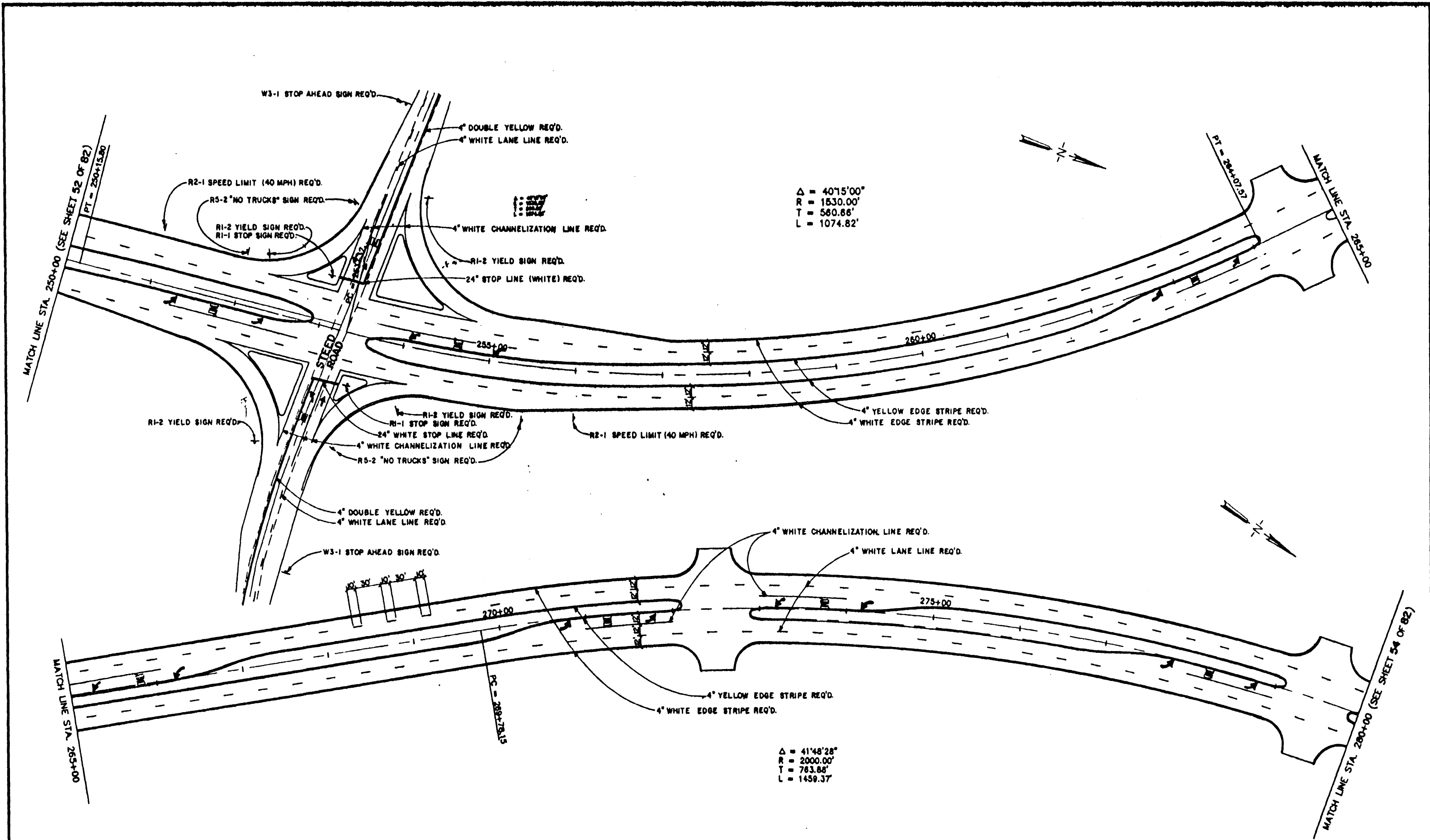
NO. DATE	REVISION	BY	DATE	BY	DATE	SHEET NUMBER
1	9-27 CHANGED SPEED LIMIT TO 40 MPH	RJM	NOV 21 1988			51 of 82



SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY

WAGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Mississippi

1	8-27	CHANGED SPEED LIMIT TO 40 MPH	R.H.	ISSUED BY L.F.F.	DATE NOV. 21, 1988	SHEET NUMBER
				DESIGNED BY J.T.S.	SCALE 1"=50'	52 OF 82



$\Delta = 40'15''00''$
 $R = 1530.00'$
 $T = 580.86'$
 $L = 1074.82'$

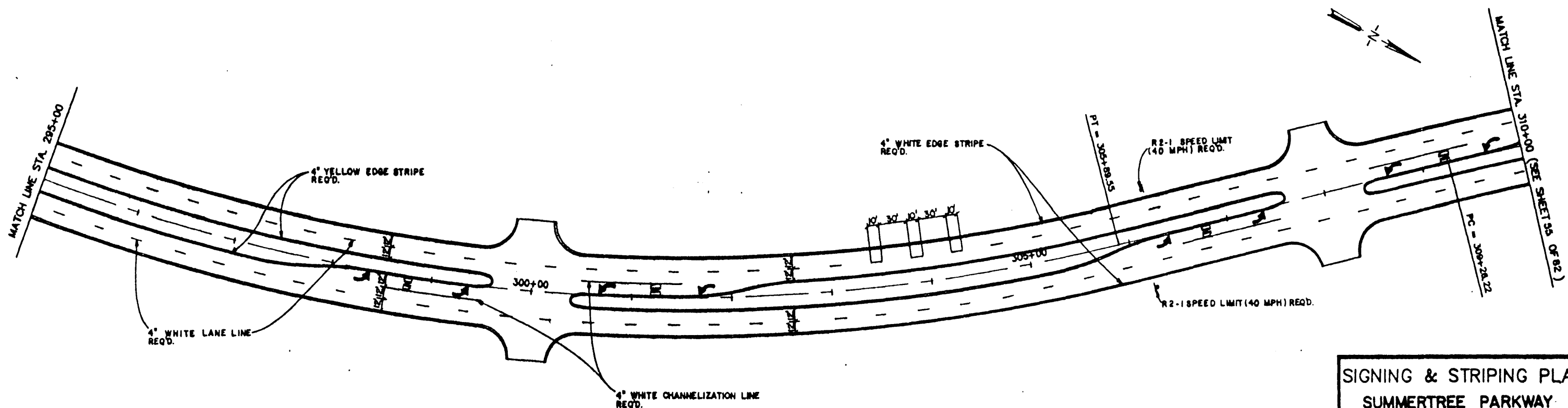
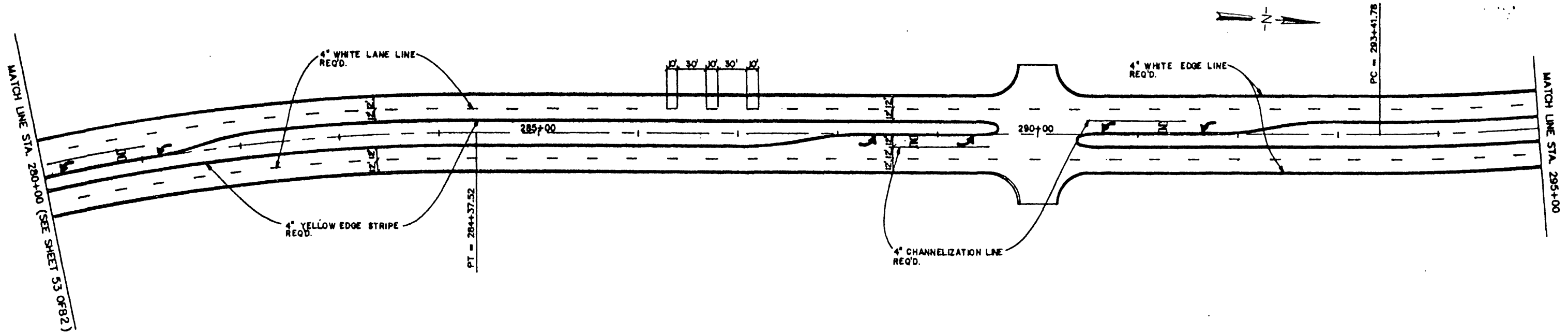
$\Delta = 41'48''28''$
 $R = 2000.00'$
 $T = 783.88'$
 $L = 1459.37'$

SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
 Consulting Engineers - Auburn, Alabama

NO.	DATE	REVISION	BY	DATE	BY	SHEET NUMBER
1	3-27	CHANGED SPEED LIMIT TO 40 MPH	RJH	NOV 26, 1999		63 of 82

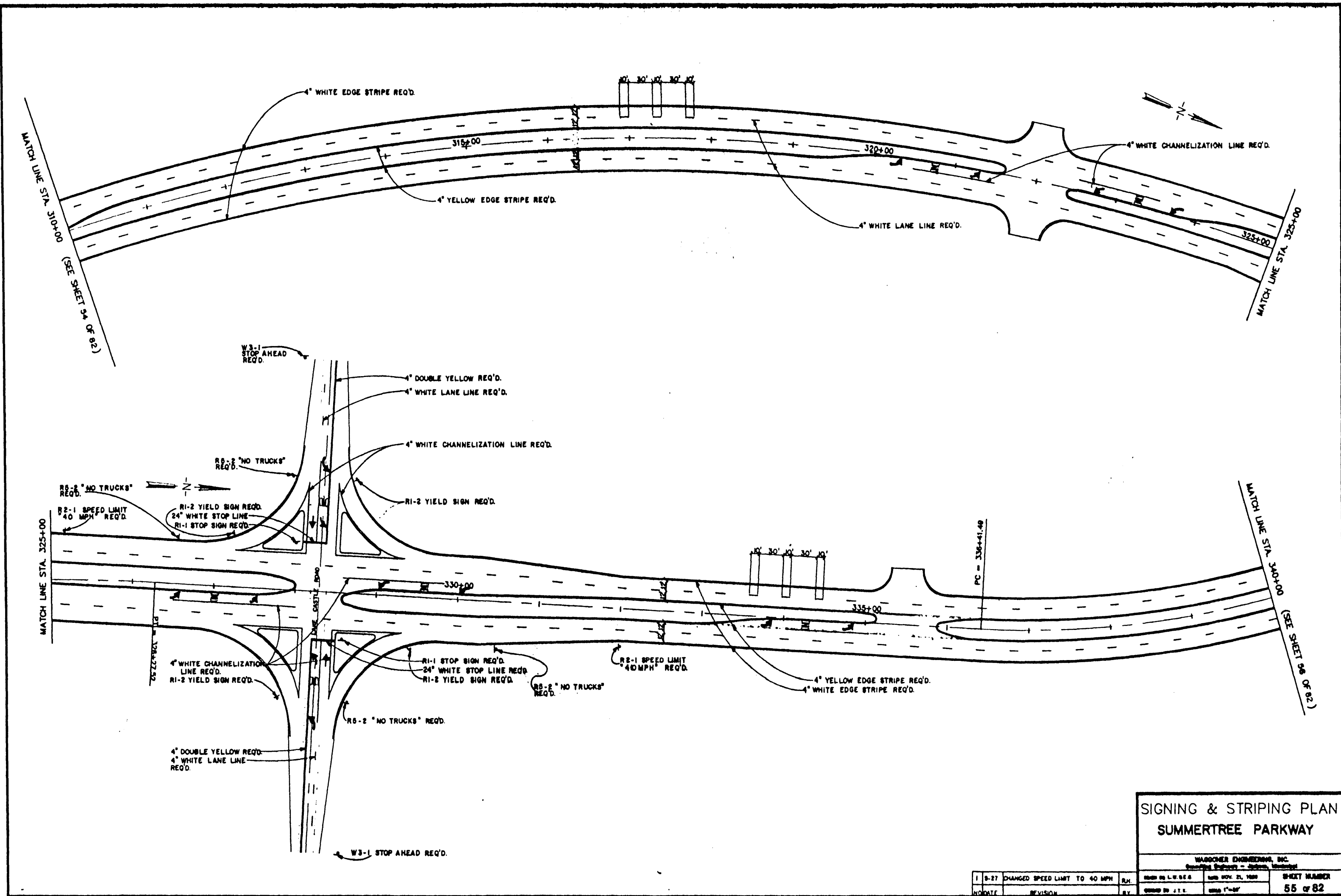
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**SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY**

WAGGONER ENGINEERING, INC.
Consulting Engineers - Architects - Planners

1	9-27	CHANGED SPEED LIMIT TO 40 MPH	R.H.	DATE IN L.S. & E.S.	DATE 100% 21, 1988	SHEET NUMBER
		REVISION	BY	DESIGNED BY J.L.H.	DATE 1-88	54 of 82

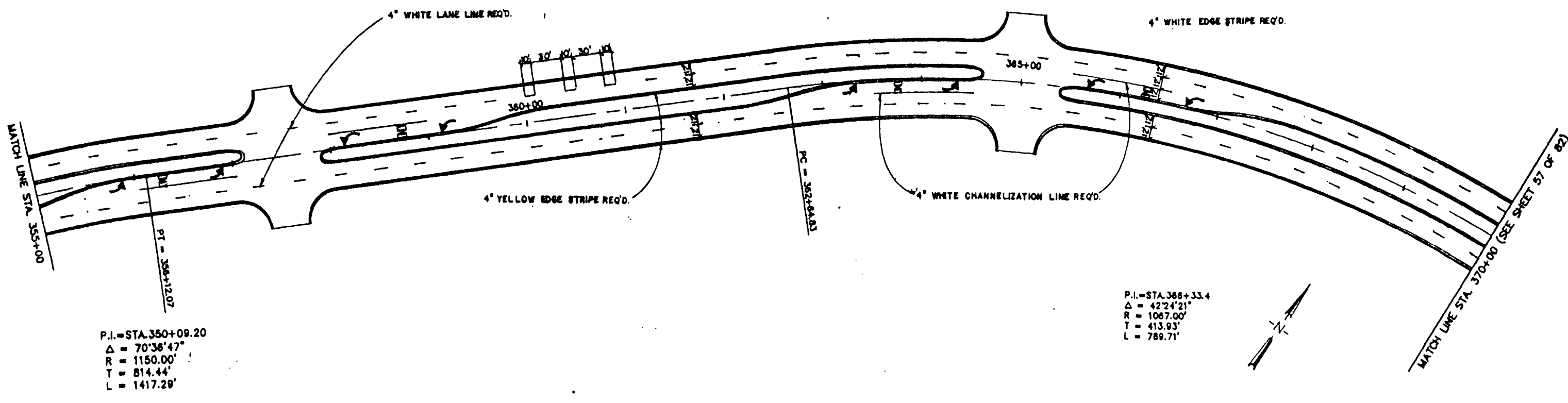
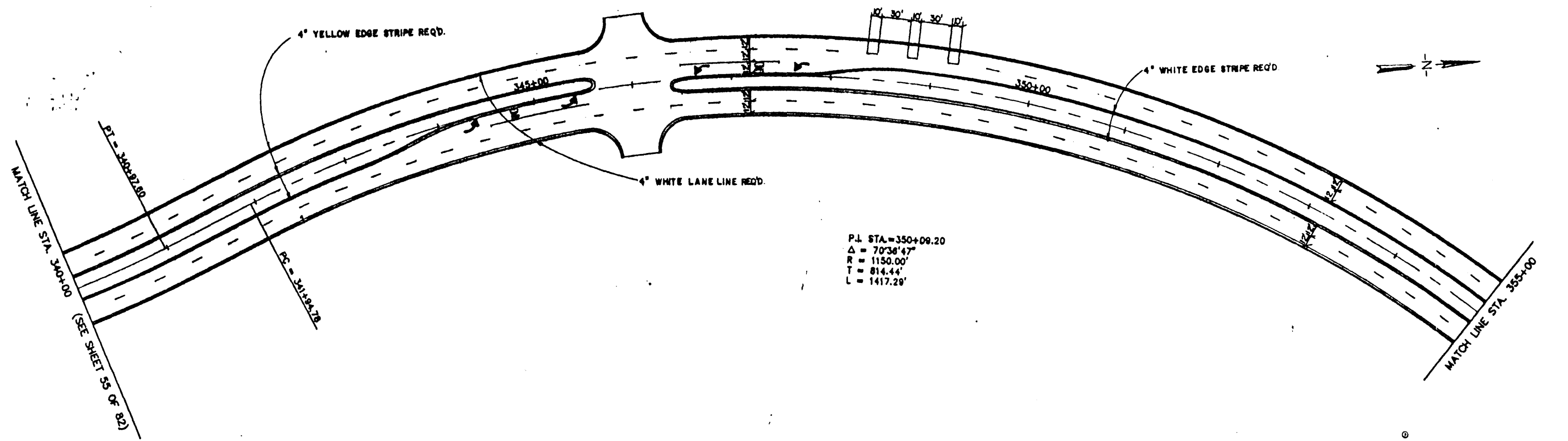


SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Mississippi

1	8-27	CHANGED SPEED LIMIT TO 40 MPH	BY	REVISION	DATE	NOV. 21, 1988	SHEET NUMBER
							55 of 82

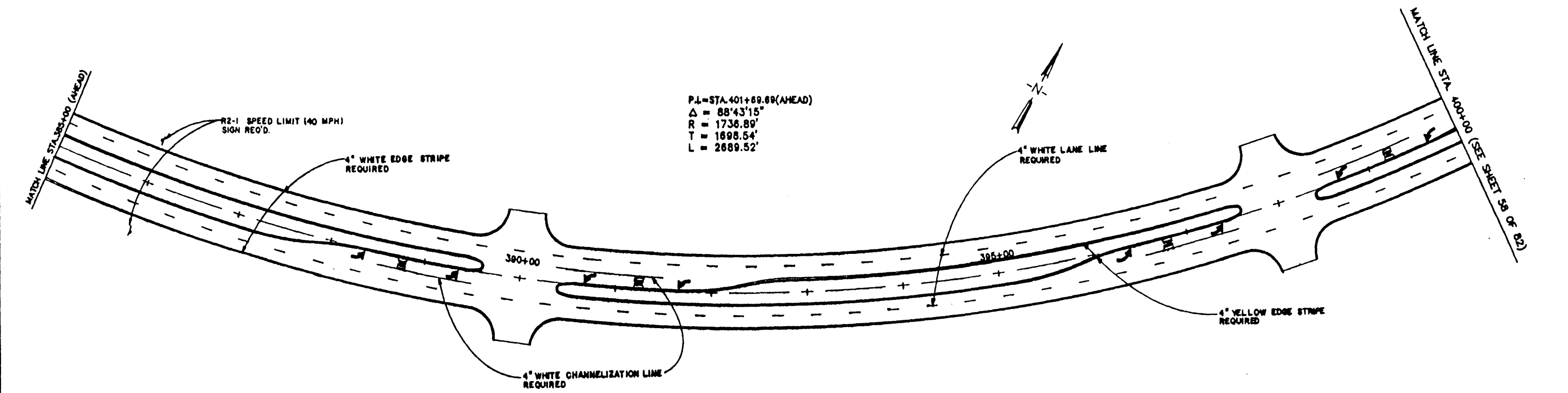
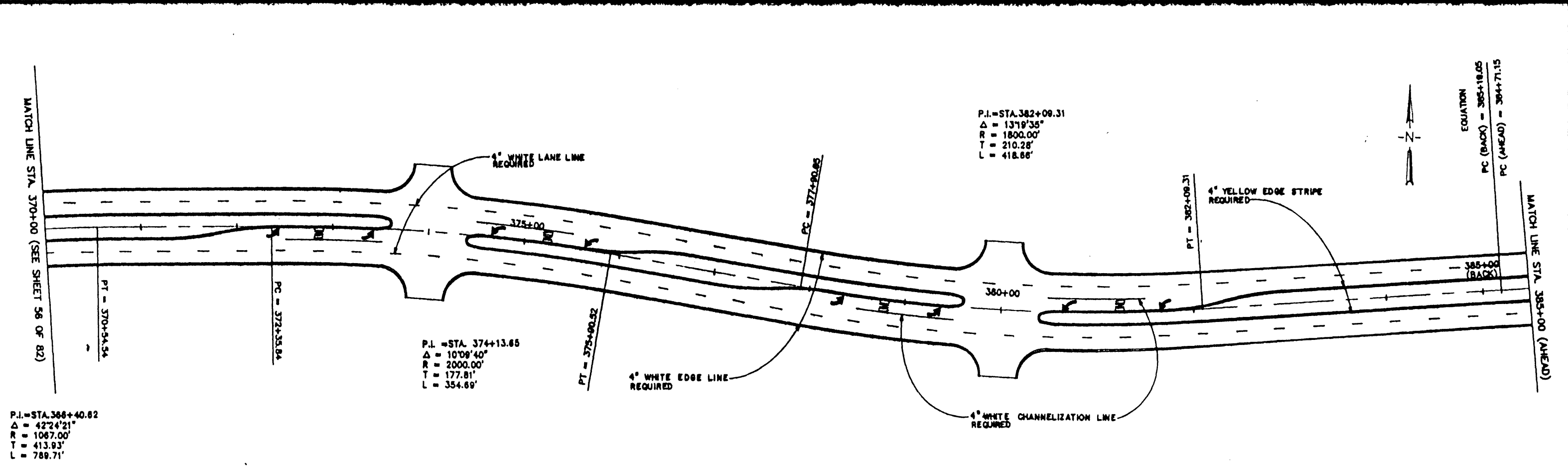
ACAD PATH: C:\DWG\SUMMERTREE\SS11



SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY

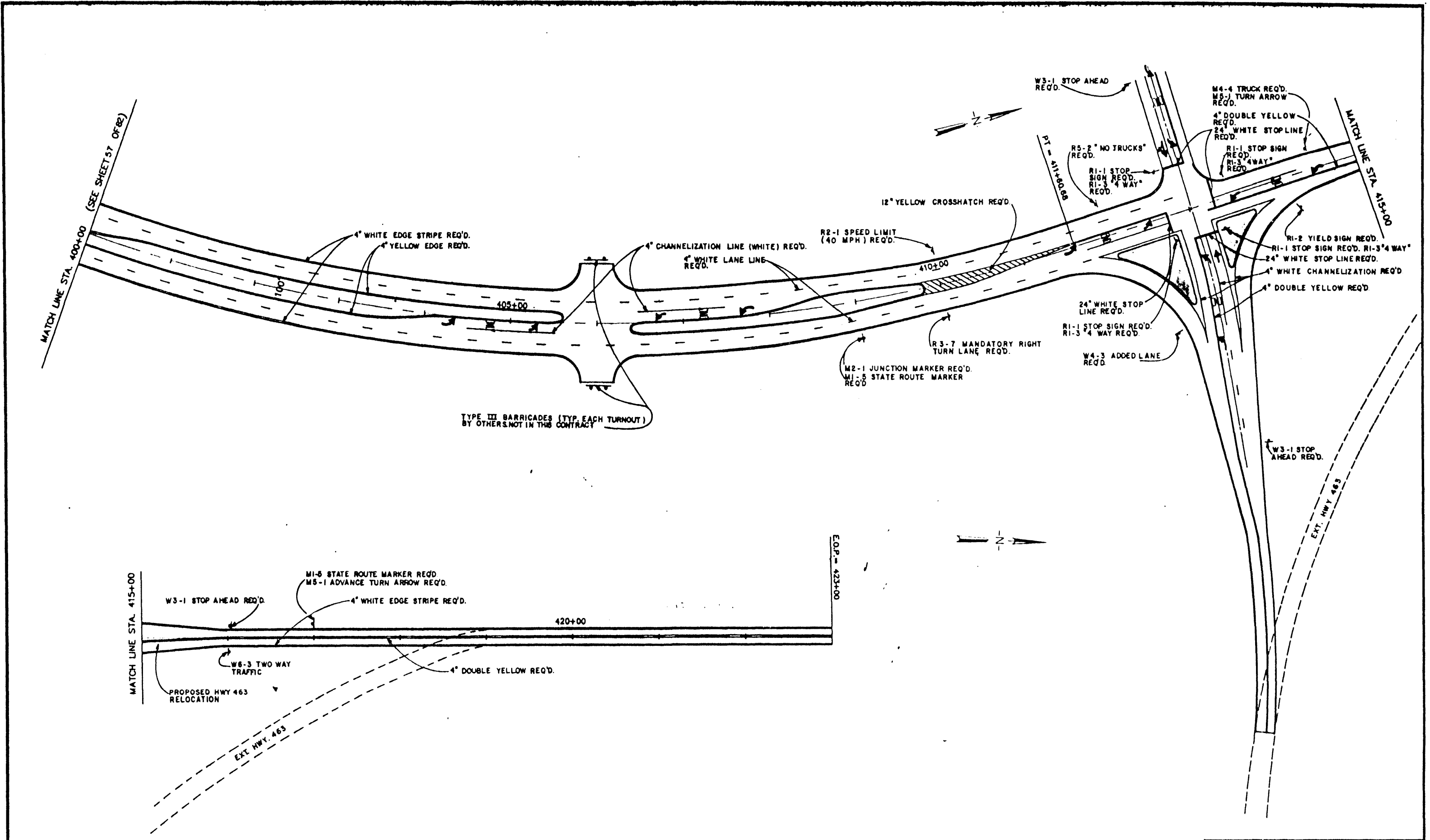
WAGNER ENGINEERING, INC.
 Consulting Engineers - Survey, Mechanical

NO.	DATE	REVISION	BY	DATE	BY	SHEET NUMBER
1	9-27	CHANGED SPEED LIMIT TO 40 MPH	R.M.	10-11-80		56 of 82



**SIGNING & STRIPING PLAN
 SUMMERTREE PARKWAY**

WAGGONER ENGINEERING, INC. <small>Professional Engineer - Indiana, Registered</small>		SHEET NUMBER	
1	8-27	CHANGED SPEED LIMIT TO 40 MPH	57 of 82
NO DATE	REVISION	BY	

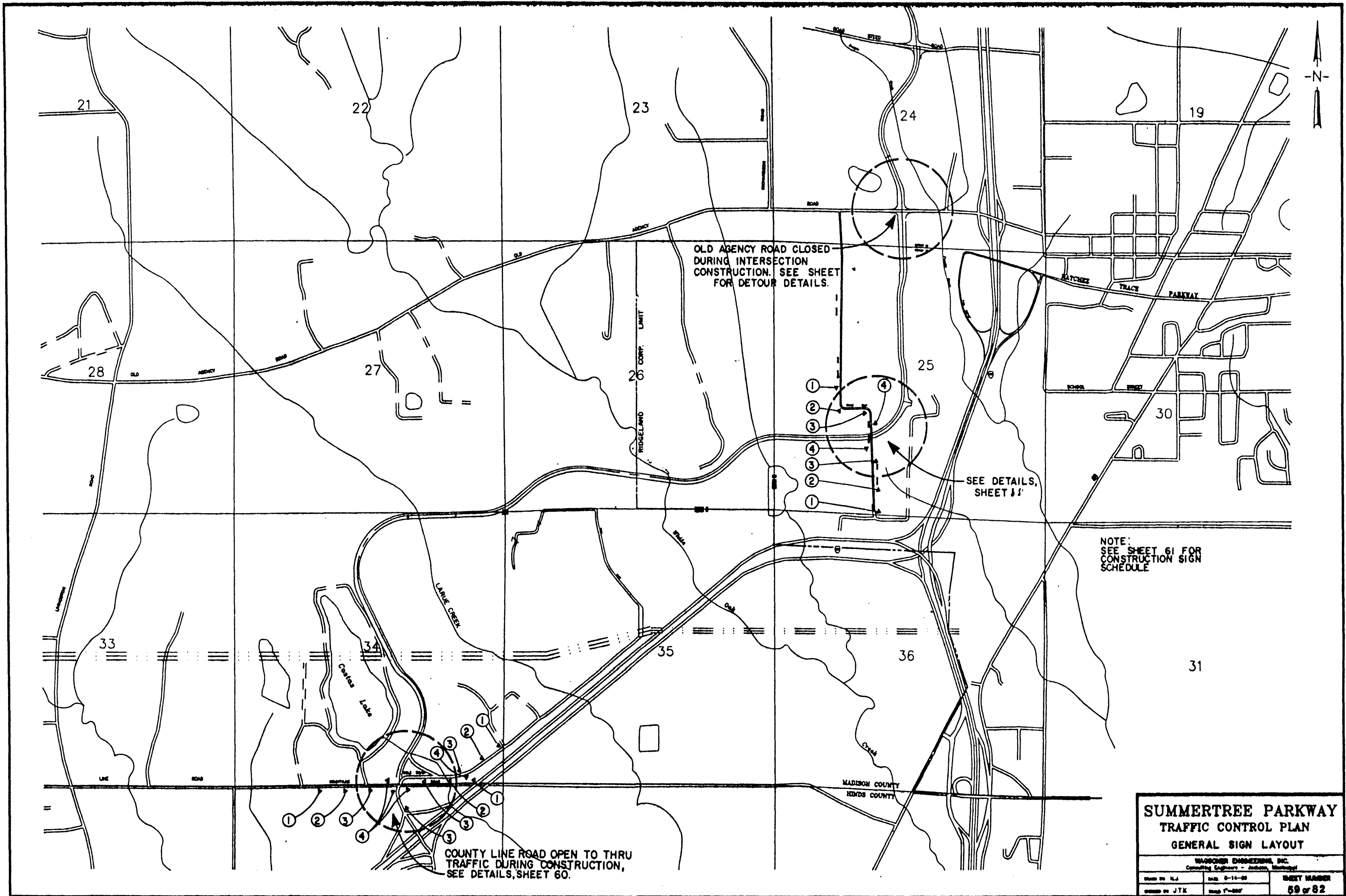


TYPE III BARRICADES (TYP. EACH TURNOUT)
BY OTHERS NOT IN THIS CONTRACT

**SIGNING & STRIPING PLAN
SUMMERTREE PARKWAY**

WAGGONER ENGINEERING, INC.
Professional Engineers - Michigan, Member

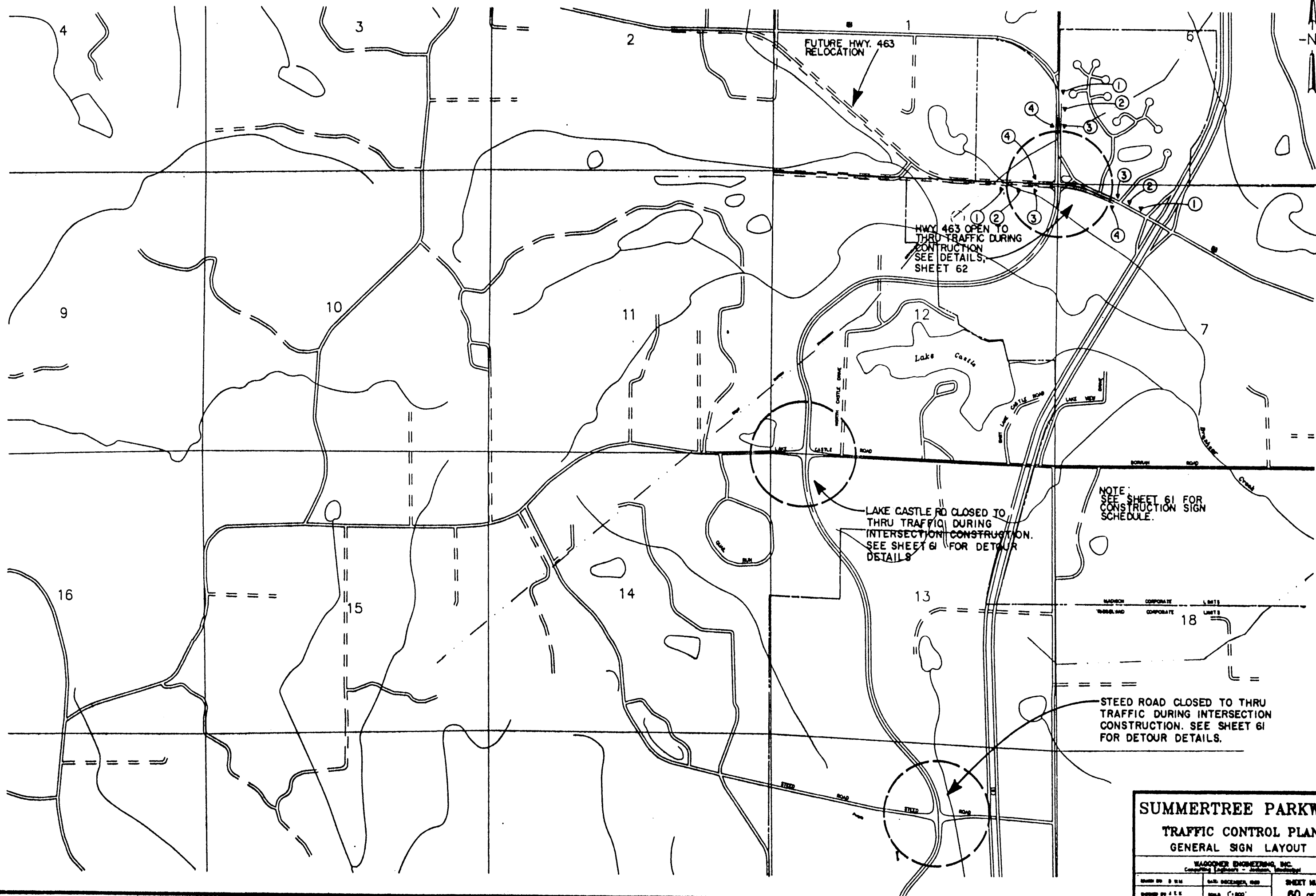
1	9-27	CHANGED SPEED LIMIT TO 40 MPH	RH	DATE PLOTTED	NOV 21, 1988	SHEET NUMBER
		REVISION	BY	SCALE	1"=50'	58 of 82



**SUMMERTREE PARKWAY
TRAFFIC CONTROL PLAN
GENERAL SIGN LAYOUT**

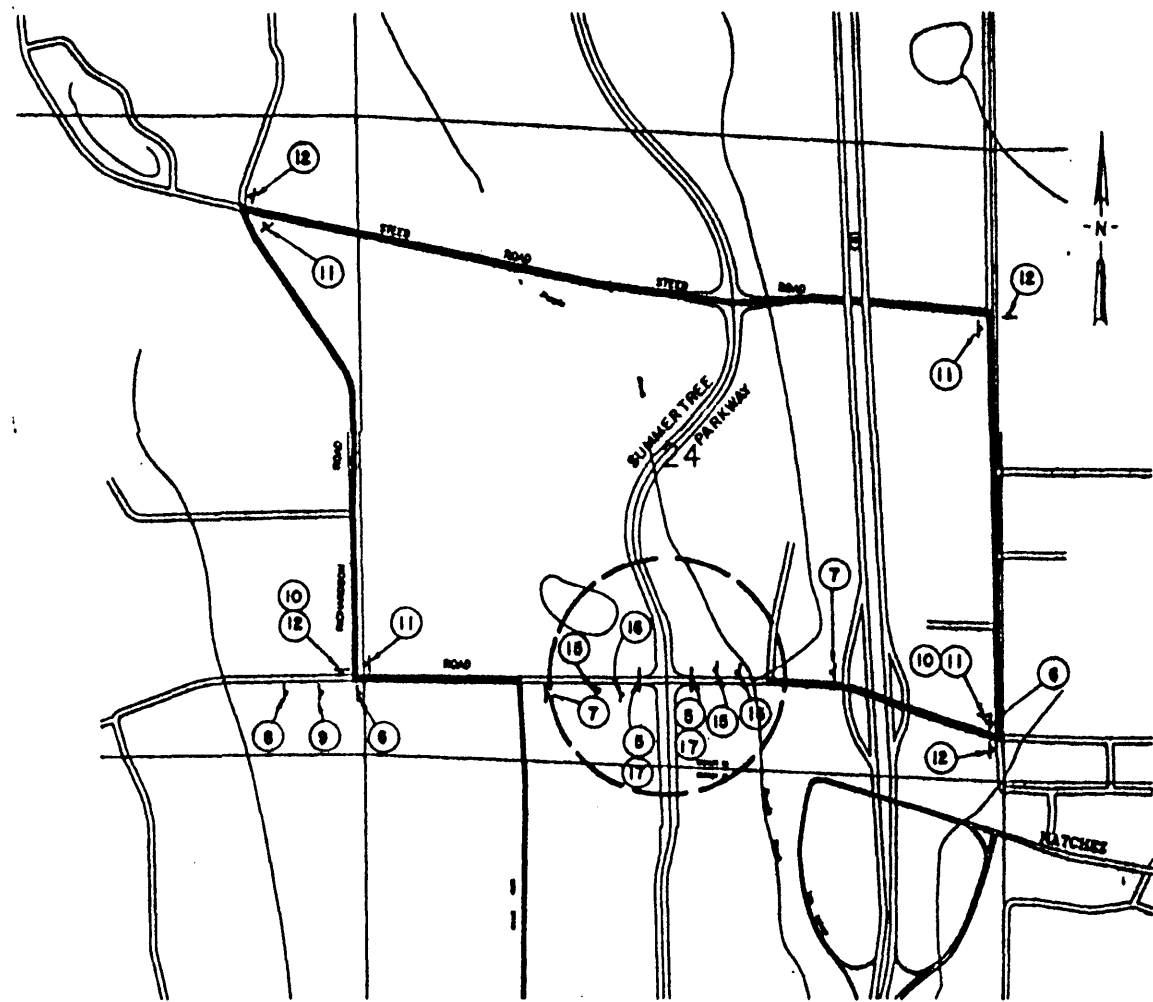
WAGGONER ENGINEERING, INC.
Consulting Engineers - Jackson, Mississippi

DESIGNED BY: H.L.	DATE: 8-14-82	SHEET NUMBER
DRAWN BY: J.T.K.	SCALE: 1"=200'	59 of 82

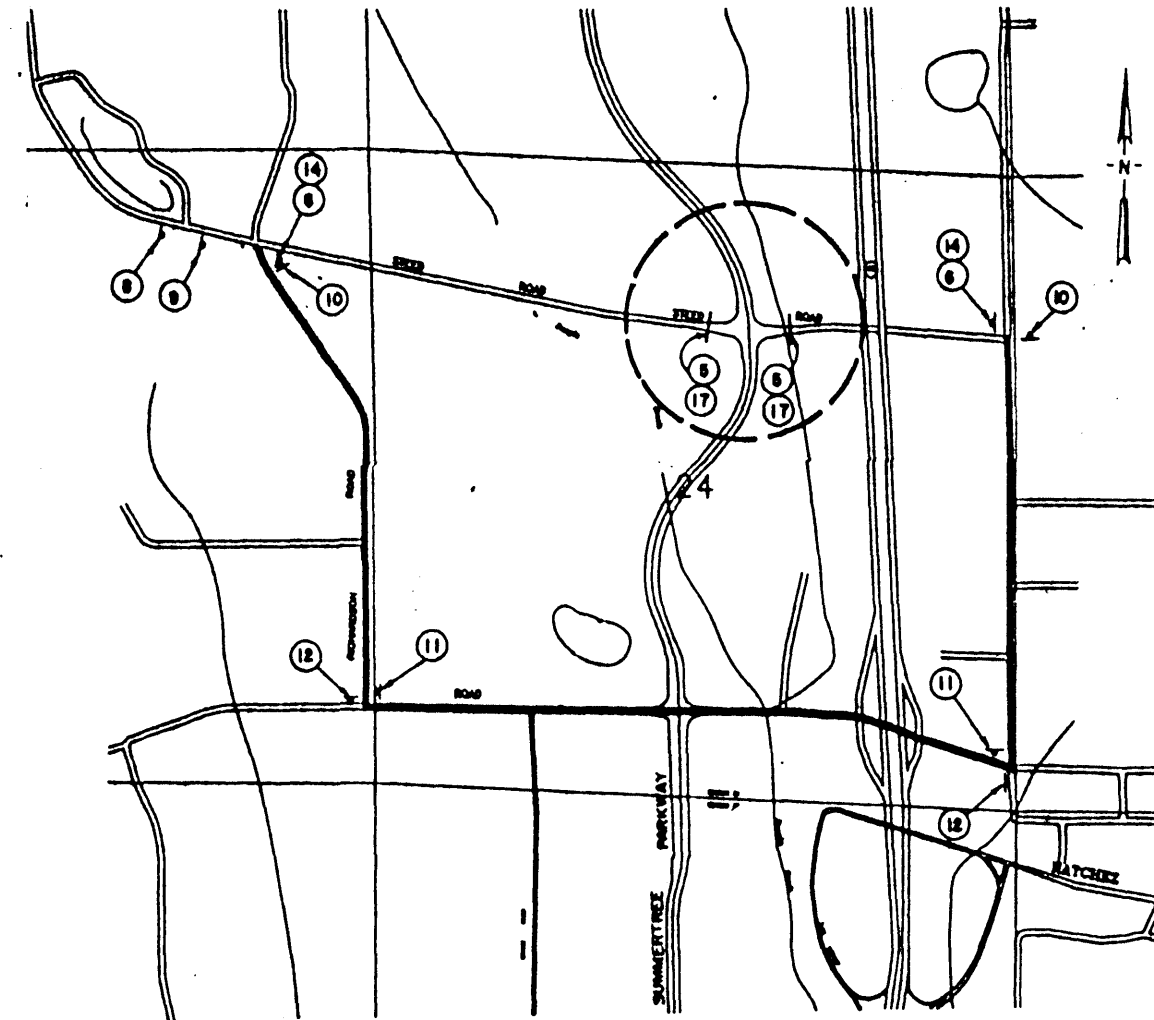


**SUMMERTREE PARKWAY
TRAFFIC CONTROL PLAN
GENERAL SIGN LAYOUT**

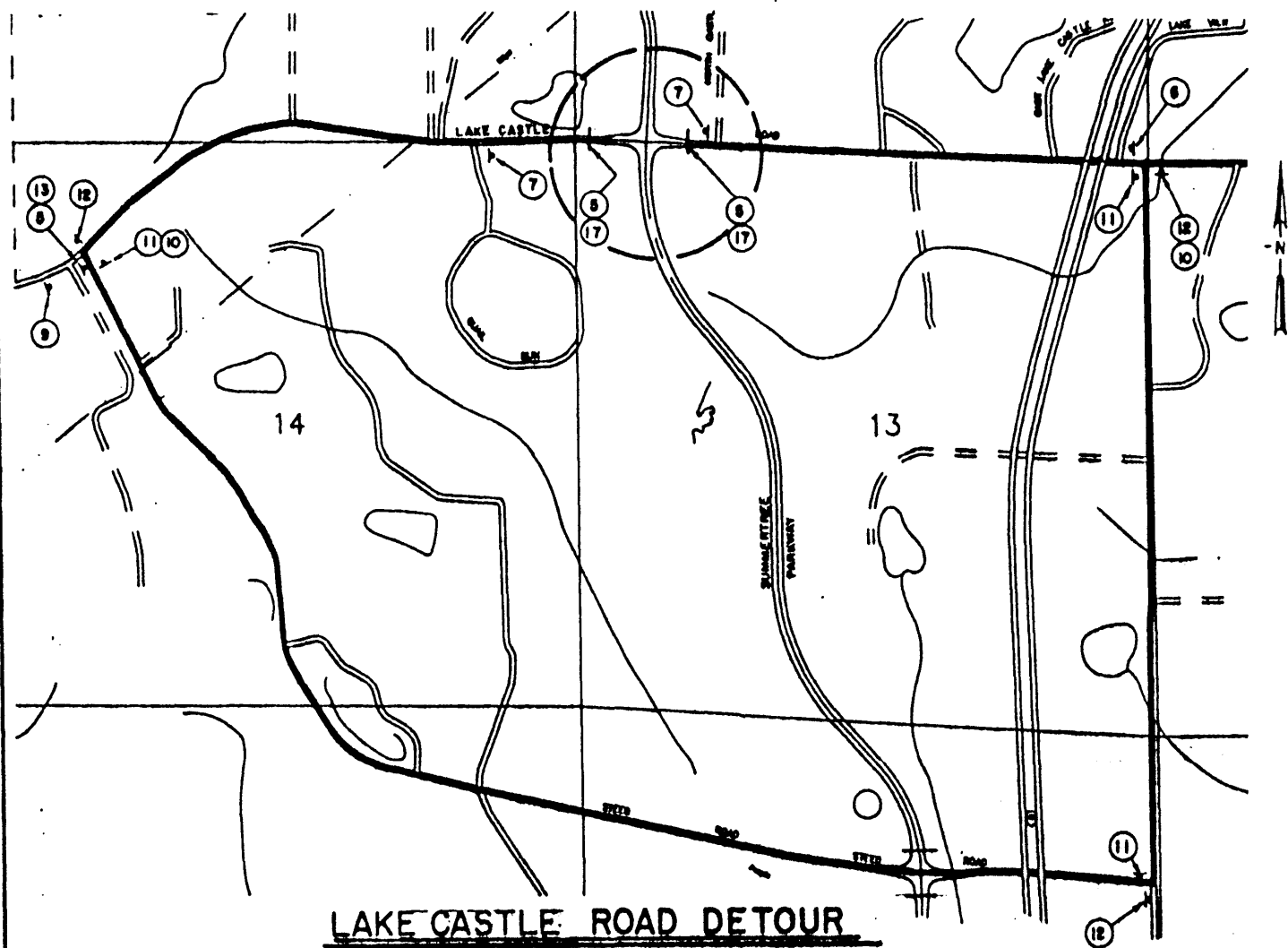
WAGGONER ENGINEERING, INC. Consulting Engineers - Architects - Surveyors		
DATE: 03/24/82	DATE: DECEMBER, 1982	SHEET NUMBER
DRAWN BY: A.L.E.	SCALE: 1"=200'	60 of 82



OLD AGENCY ROAD DETOUR



STEED ROAD DETOUR



LAKE CASTLE ROAD DETOUR

NOTE:
ONCE ONE ILLUSTRATED ROAD CLOSURE AND DETOUR IS IMPLEMENTED, ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED AND THE ROAD OPENED TO VEHICULAR TRAFFIC PRIOR TO IMPLEMENTING NEXT ROAD CLOSURE AND DETOUR.

NOTE:
ALL CONSTRUCTION TRAFFIC MUST ACCESS PROJECT ALIGNMENT FROM COUNTY LINE ROAD, OLD AGENCY ROAD EAST OF SUMMERTREE PARKWAY, AND MISSISSIPPI HIGHWAY 463 ONLY. NO CONSTRUCTION TRAFFIC WILL BE PERMITTED ON OTHER LOCAL OR COUNTY ROADS.

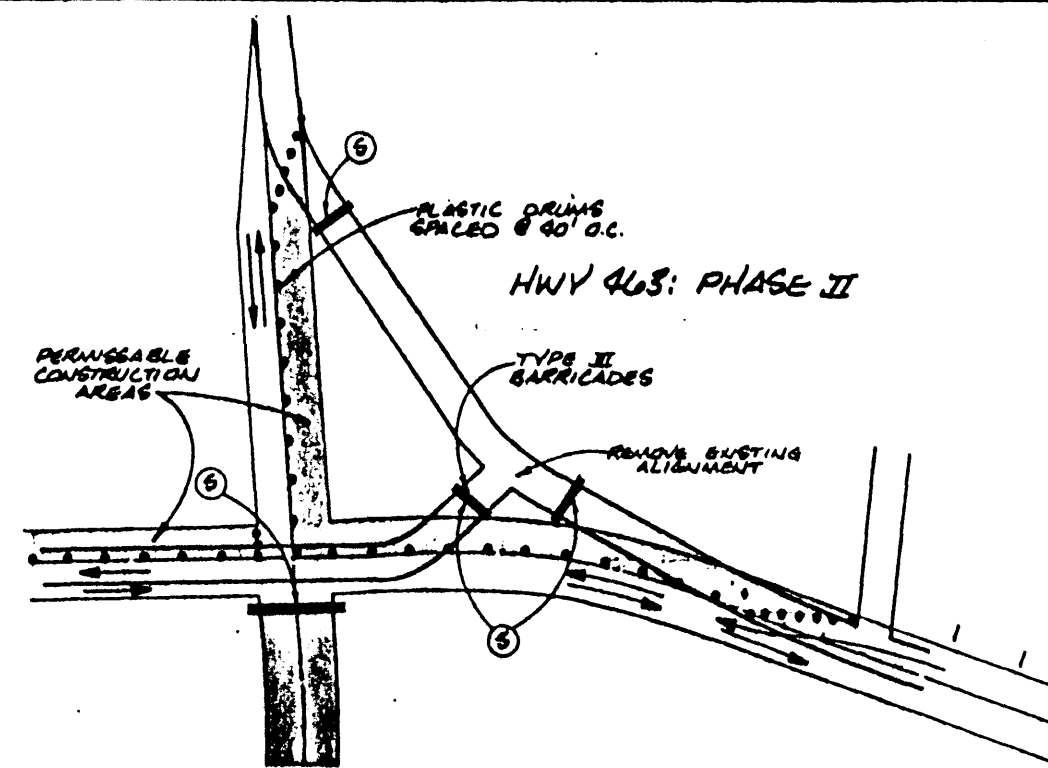
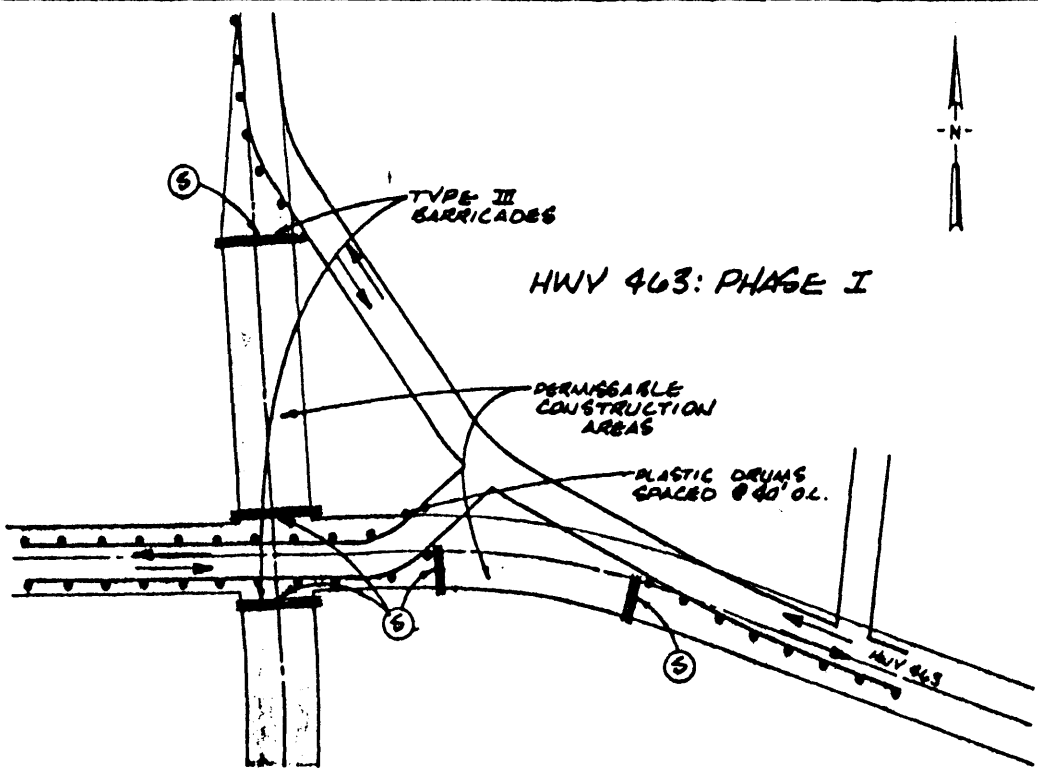
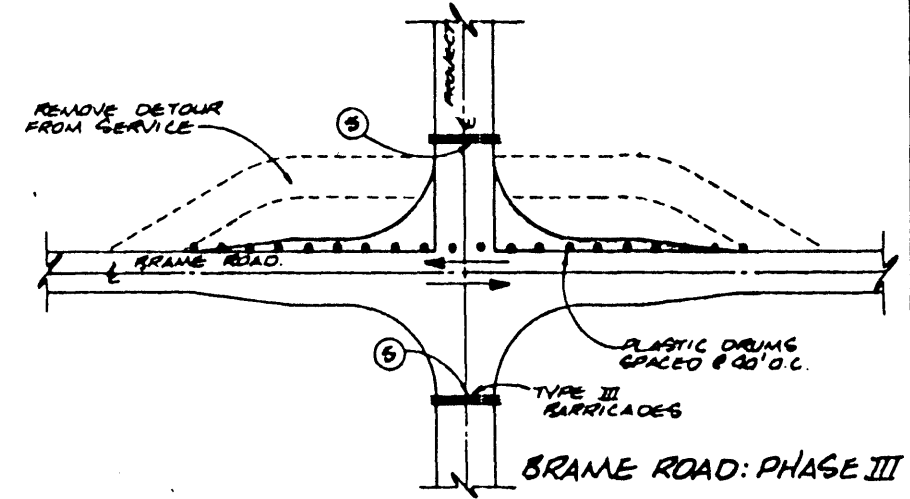
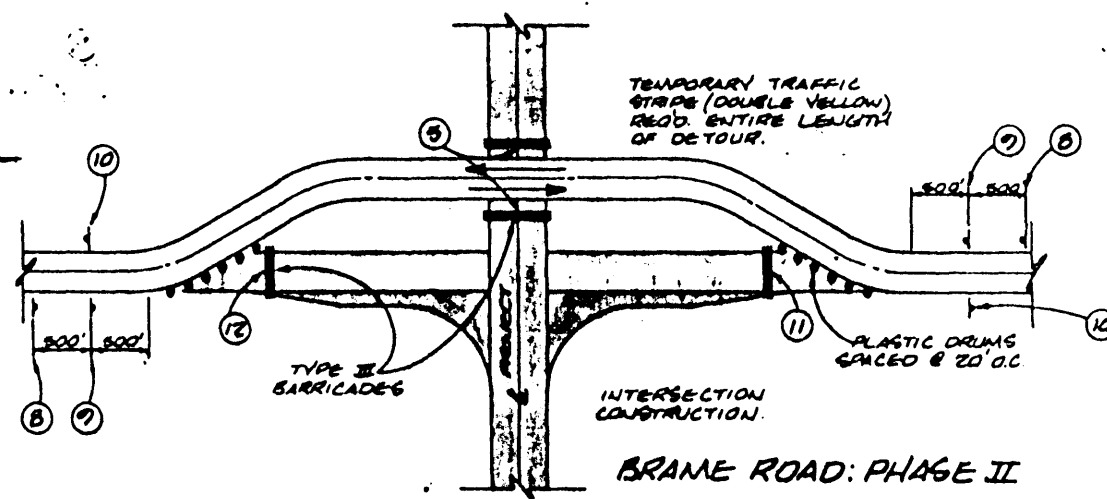
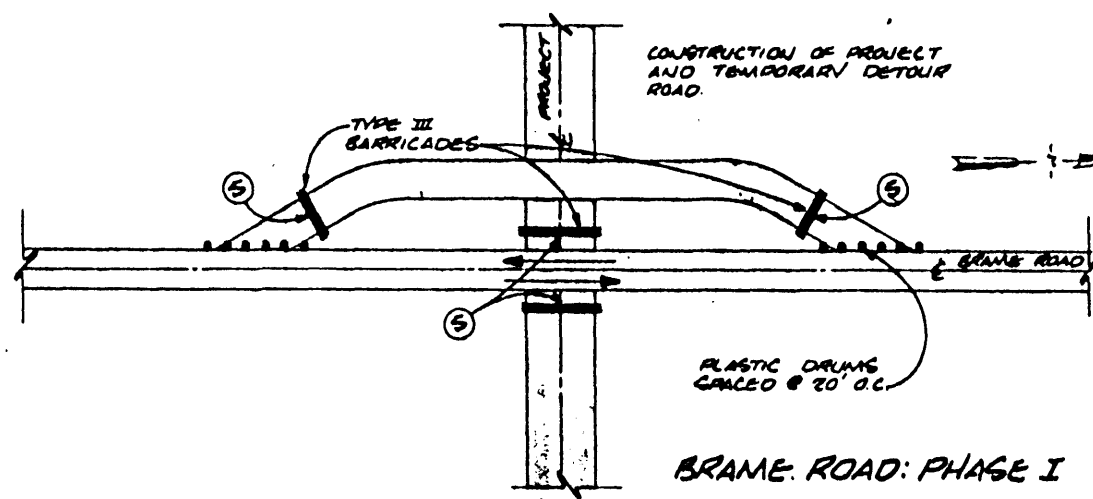
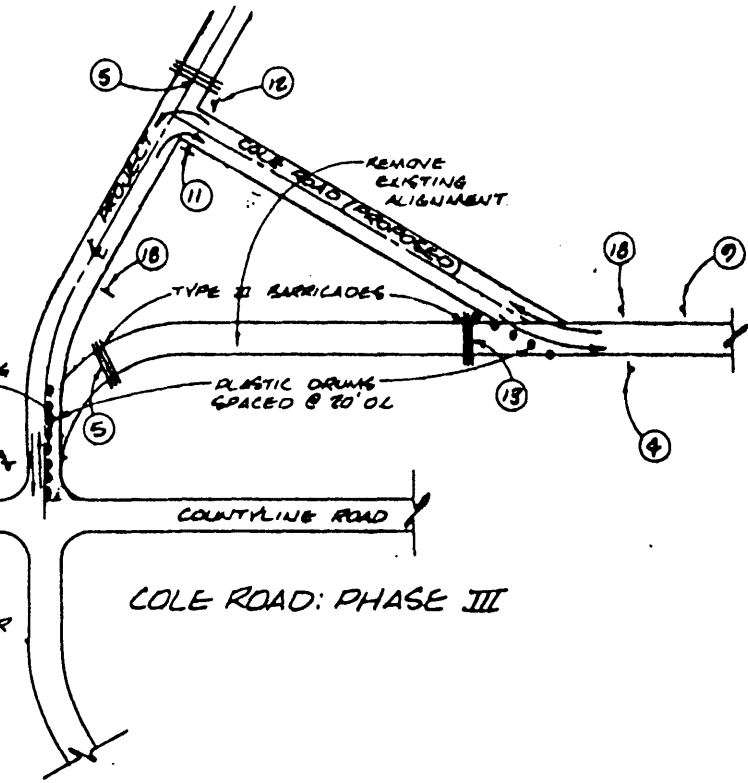
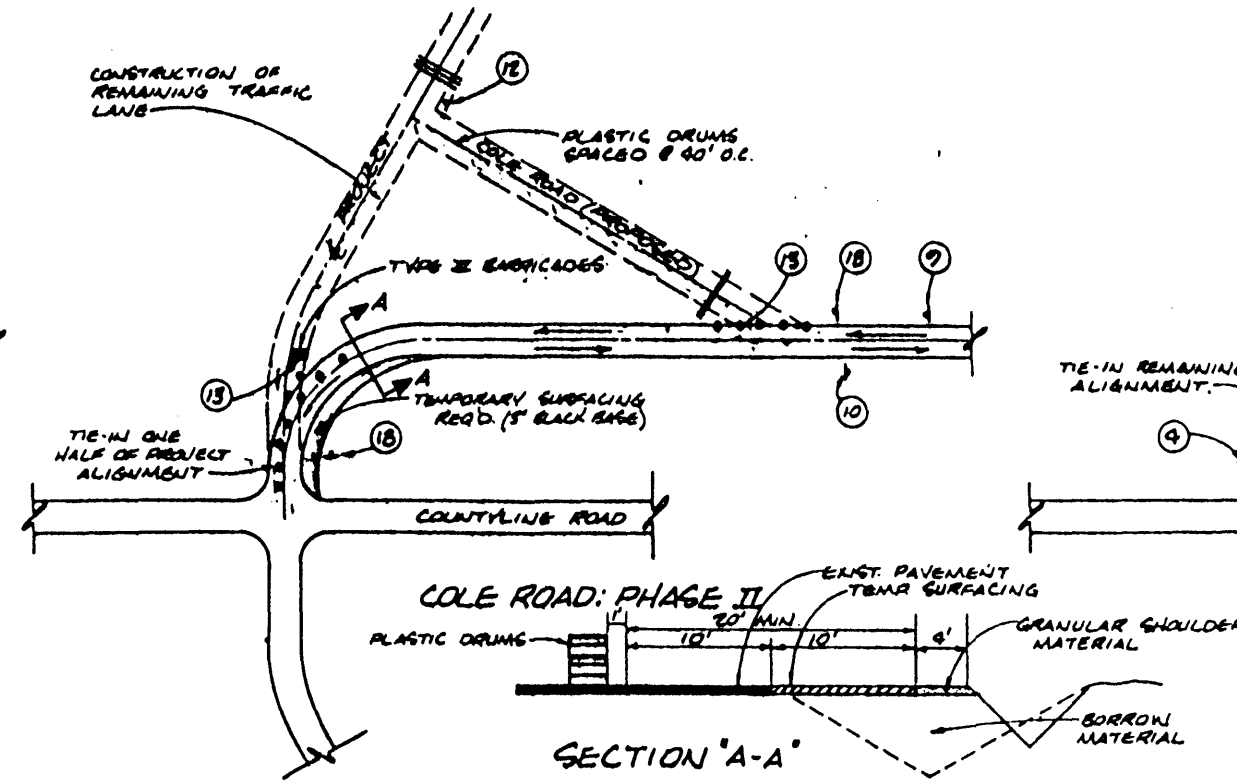
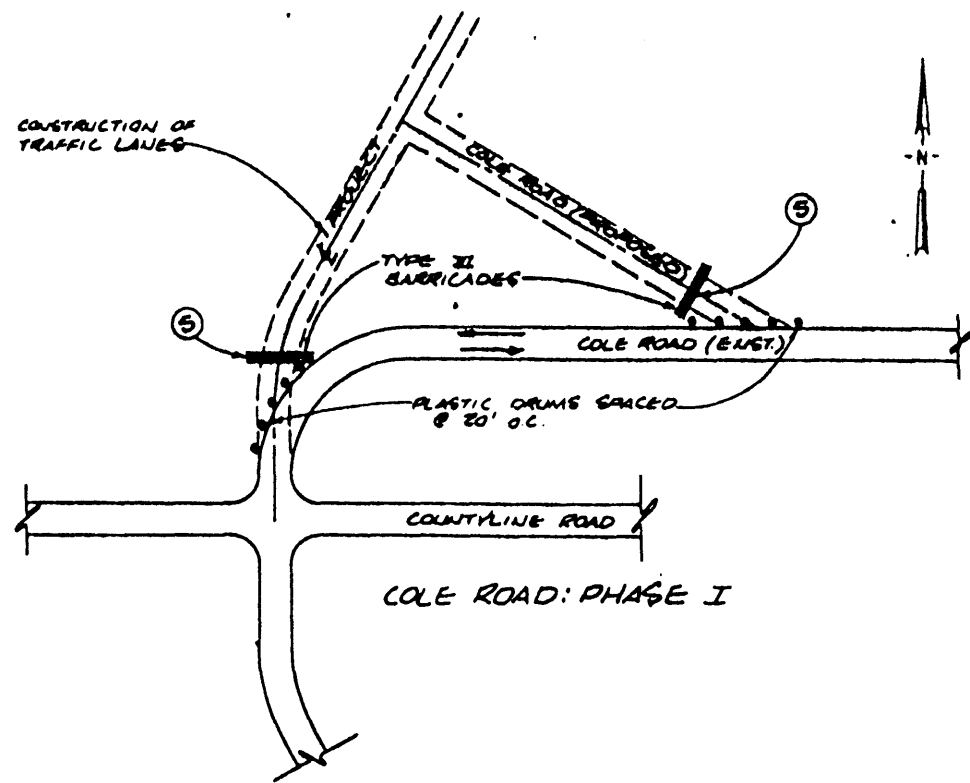
CONSTRUCTION SIGN SCHEDULE

NUMBER	DESIGNATION	REMARKS
1	W20-1	ROAD CONSTRUCTION 1500 FT.
2	W20-1	ROAD CONSTRUCTION 1000 FT.
3	W20-1	ROAD CONSTRUCTION 500 FT.
4	W20-2	END CONSTRUCTION
5	R11-2	ROAD CLOSED
6	R11-3	ROAD CLOSED - MILES AHEAD
7	R11-4	ROAD CLOSED TO THRU TRAFFIC
8	W20-2	DETOUR 1000 FT.
9	W20-2	DETOUR 500 FT.
10	M4-9A	END DETOUR
11	M4-9R	DETOUR RIGHT
12	M4-9L	DETOUR LEFT
13	M4-10R	DETOUR RIGHT
14	M4-10L	DETOUR LEFT
15	W20-3	ROAD CLOSED 1000 FT.
16	W20-3	ROAD CLOSED 500 FT.
17	W20-3	TYPE III BARRICADE
18	W20-2	DETOUR AHEAD

**SUMMERTREE PARKWAY
TRAFFIC CONTROL PLAN
DETOUR DETAILS**

WAGGONER ENGINEERING, INC.
Consulting Engineers - Jackson, Ms.

Drawn by: L.W.B.E.E. Date: November, 1989 SHEET NO.
Checked by: J.T.K. Scale: None 61 of 82



SUMMERTREE PARKWAY
TRAFFIC CONTROL PLAN
INTERSECTION PHASE DETAILS

WAGGONER ENGINEERING, INC.
Consulting Engineers - Jackson, Ms.

Drawn by: W.B.E.	Date: November, 1989	SHEET NO.
Checked by: J.T.K.	Scale: As noted	62 of 82

ESTIMATED QUANTITIES - BRIDGE "A"								
ITEM	TEST PILE	CLASS "A" BRIDGE CONCRETE	12" x 12" CONCRETE PILES	40' PRESTR. CONCRETE BEAM	REINFORCEMENT	FILTER FABRIC	GUARDRAIL	LOOSE RIPRAP (300 LB)
LOCATION	EACH	CU YD	LIN. FT.	LIN. FT.	LBS	SQ YD.	LIN. FT.	TONS
END BENTS		15.4	630		2706	1125		1371
INTER BENTS		9.6	450		1240			
END SPANS		65.9		397.50	12,216		160	
INTER SPANS		31.5		198.75	6191		80	
TOTALS	0	122.4	1080	596.25	22,353	1125	240	760

ESTIMATED QUANTITIES - BRIDGE "B"								
ITEM	TEST PILE	CLASS "A" BRIDGE CONCRETE	12" x 12" CONCRETE PILES	40' PRESTR. CONCRETE BEAM	REINFORCEMENT	FILTER FABRIC	GUARDRAIL	LOOSE RIPRAP (300 LB)
LOCATION	EACH	CU YD.	LIN. FT.	LIN. FT.	LBS.	SQ YD.	LIN. FT.	TONS
END BENTS		15.4	630		2706	1125		1371
INTER BENTS	1.0	9.6	450		1240			
END SPANS		65.9		397.50	12,216		160	
INTER SPANS		31.5		198.75	6191		80	
TOTALS	1.0	122.4	1080	596.25	22,353	1125	240	760

ESTIMATED QUANTITIES - TOTAL PROJECT								
ITEM	TEST PILE	CLASS "A" BRIDGE CONCRETE	12" x 12" CONCRETE PILES	40' PRESTR. CONCRETE BEAM	REINFORCEMENT	FILTER FABRIC	GUARDRAIL	LOOSE RIPRAP (300 LB)
LOCATION	EACH	CU YD.	LIN. FT.	LIN. FT.	LBS	SQ YD.	LIN. FT.	TONS
END BENTS		30.8	1260		5412	2250		2742
INTER BENTS	1.0	19.2	900		2480			
END SPANS		131.8		795.0	24,432		320	
INTER SPANS		63.0		397.5	12,302		160	
TOTALS	1.0	244.8	2160	1192.5	44,708	2250	480	1520

DRAINAGE DATA

DRAINAGE AREA 4.38 SQ MI
 SLOPE OF BASIN 38 FT/MI
 LENGTH OF BASIN 3.03 MI
 FREQUENCY 0
 50 YR 4000 CFS
 100 YR 5000 CFS
 A₅₀ REQ'D 800 SQ FT
 MAX V₅₀ 5 FPS
 A₅₀ PROVIDED 900 SQ FT
 ACTUAL V₅₀ 4.44 FPS

GENERAL NOTES

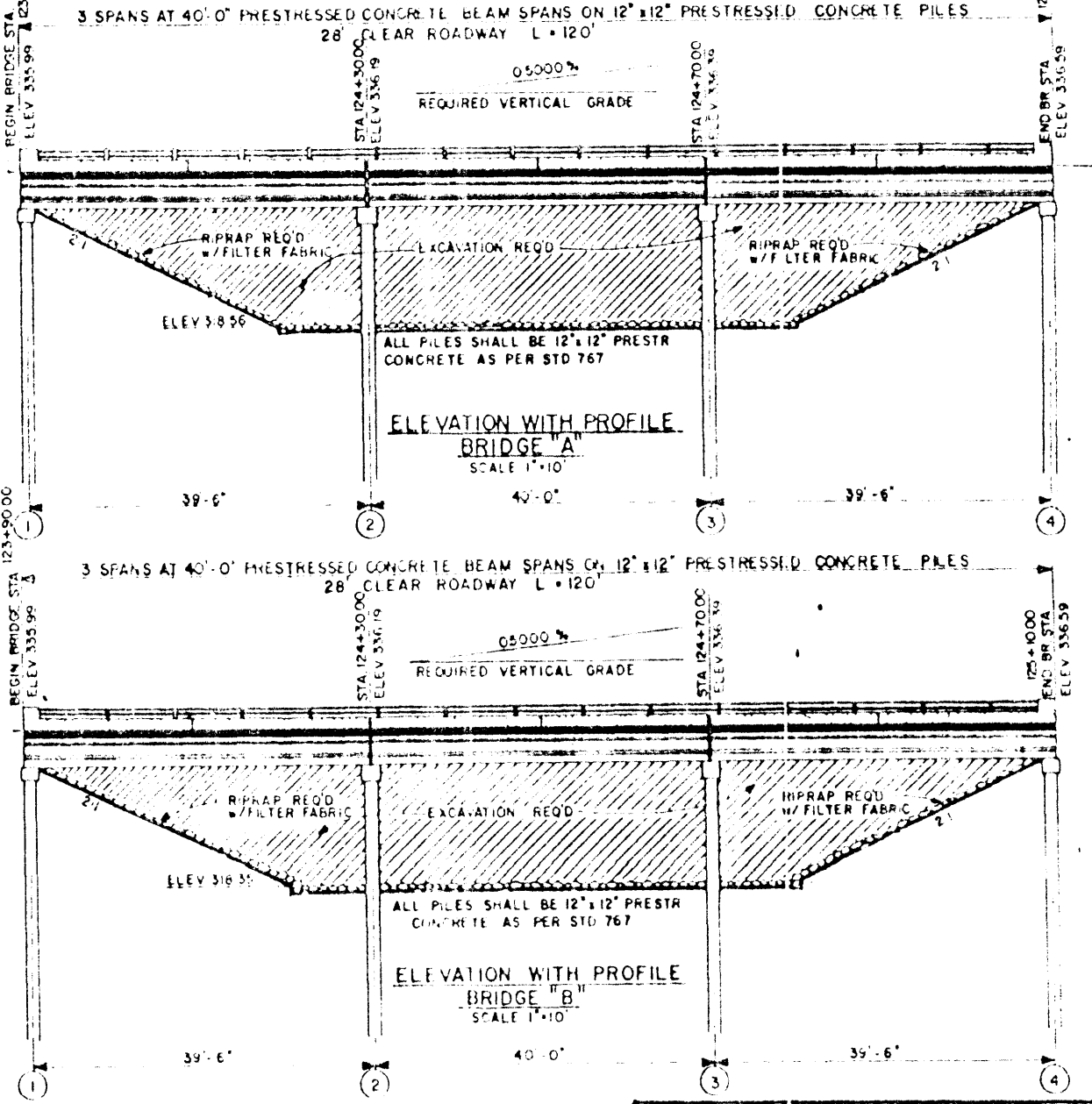
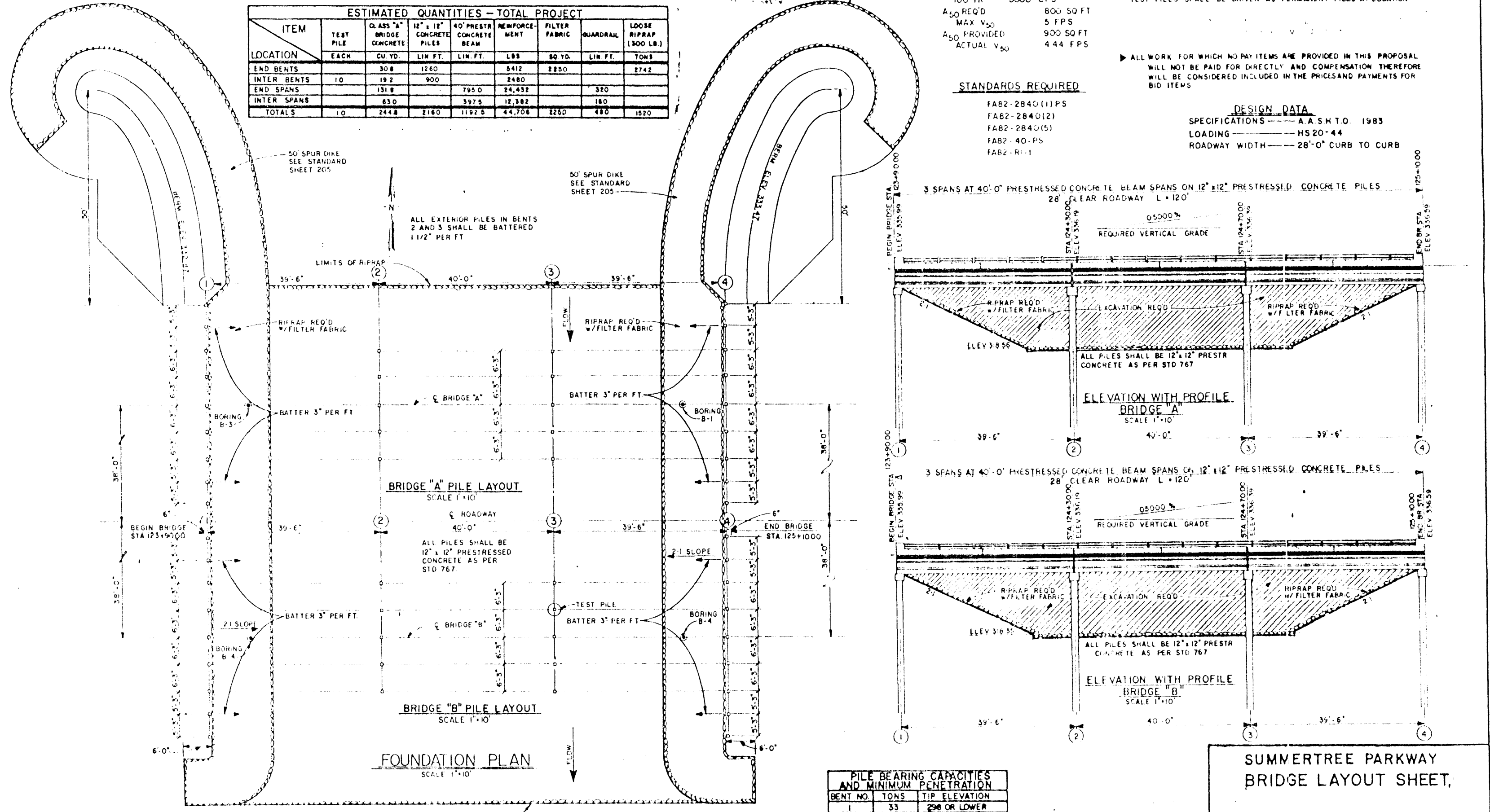
- ▶ SPECIFICATIONS MISSISSIPPI STANDARD SPECIFICATIONS FOR STATE AID ROAD AND BRIDGE CONSTRUCTION, 1989 EDITION
- ▶ NO UNAUTHORIZED CHANGE OF PLANS WILL BE PERMITTED
- ▶ EXPANSION JOINT MATERIAL SHALL BE BITUMINOUS FIBER TYPE
- ▶ ALL CONCRETE INCLUDING BRIDGE RAILING, SHALL BE CLASS "A" BRIDGE CONCRETE
- ▶ ALL CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH SECTION 8-804-23 OF THE SPECIFICATIONS
- ▶ TEST PILES SHALL BE DRIVEN AS PERMANENT PILES AT LOCATION
- ▶ ALL WORK FOR WHICH NO PAY ITEMS ARE PROVIDED IN THIS PROPOSAL WILL NOT BE PAID FOR DIRECTLY AND COMPENSATION THEREFORE WILL BE CONSIDERED INCLUDED IN THE PRICES AND PAYMENTS FOR BID ITEMS

STANDARDS REQUIRED

- FAB2-2840(1)PS
- FAB2-2840(2)
- FAB2-2840(5)
- FAB2-40-PS
- FAB2-R1-1

DESIGN DATA

- SPECIFICATIONS A.A.S.H.T.O. 1983
- LOADING HS20-44
- ROADWAY WIDTH 28'-0" CURB TO CURB

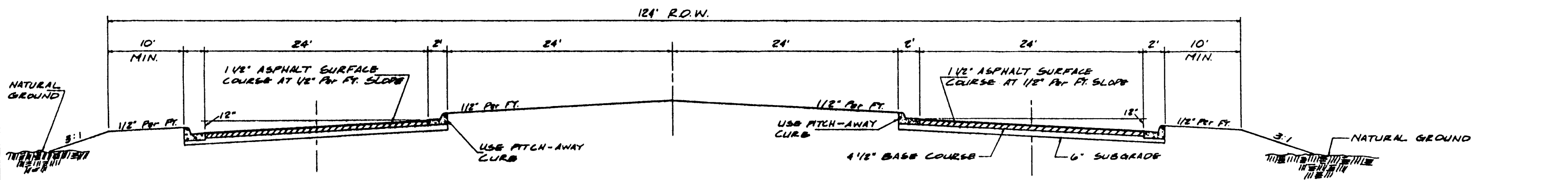


PILE BEARING CAPACITIES AND MINIMUM PENETRATION		
BENT NO.	TONS	TIP ELEVATION
1	33	298 OR LOWER
2	42	298 OR LOWER
3	42	298 OR LOWER
4	33	298 OR LOWER

**SUMMERTREE PARKWAY
BRIDGE LAYOUT SHEET,**

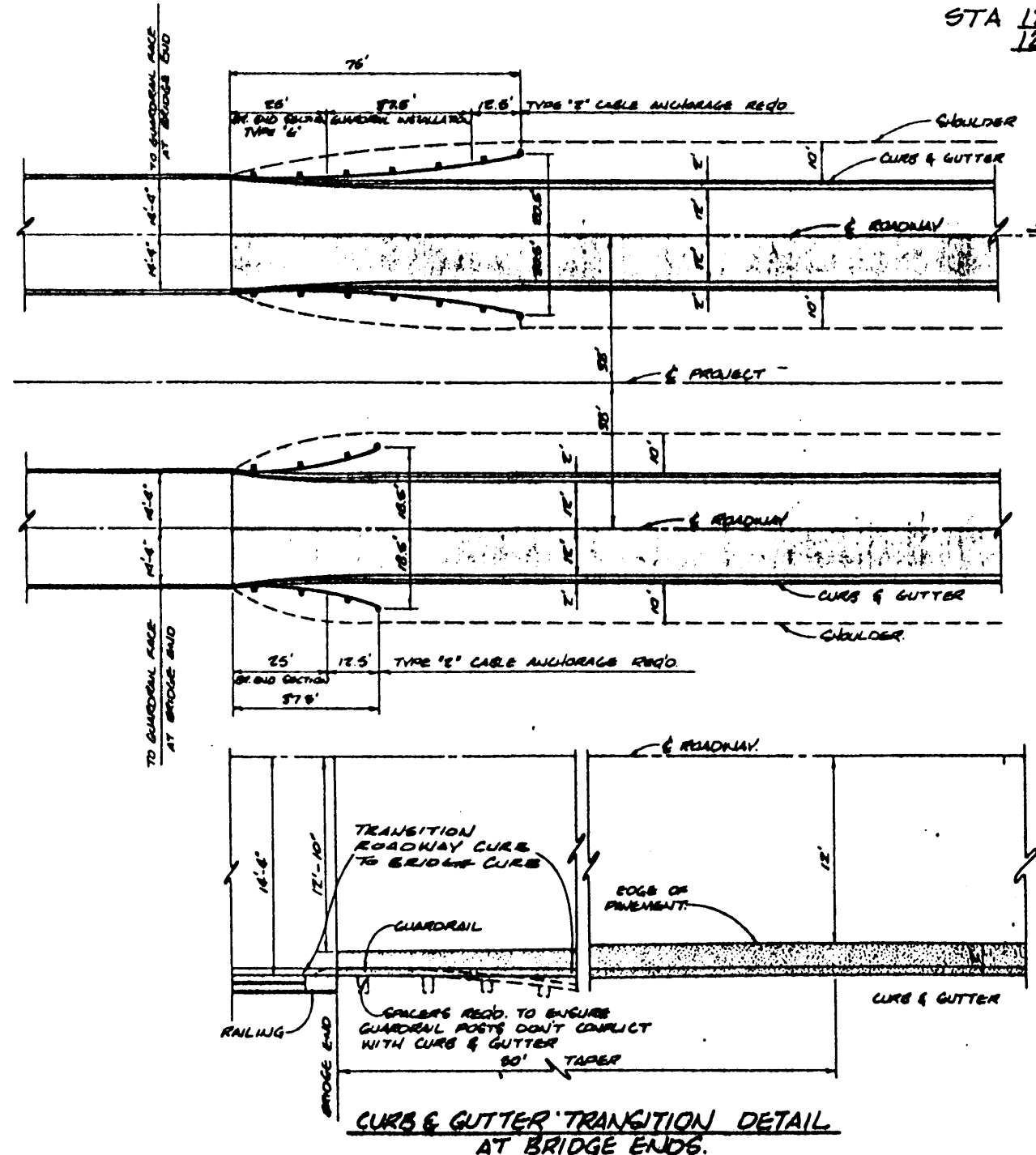
WAGGONER ENGINEERING, INC
Consulting Engineers - Jackson, Ms

Drawn by: LW BEE	Date: November, 1989	SHEET NO
Checked by: JTK	Scale: As noted	63 OF 82



TYPICAL CURB AND GUTTER BRIDGE APPROACH SECTION

STA $123+40$ TO $123+90$ AND $125+10$ TO $125+60$

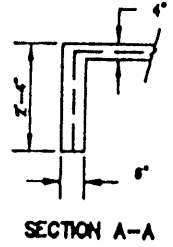
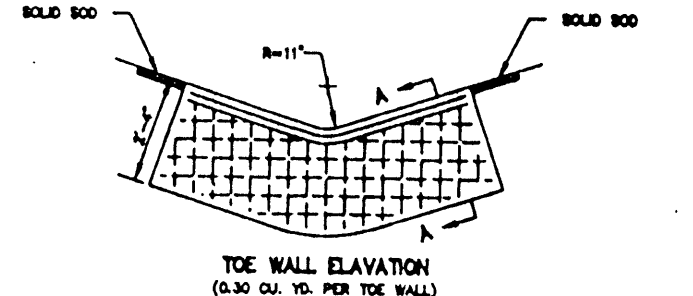
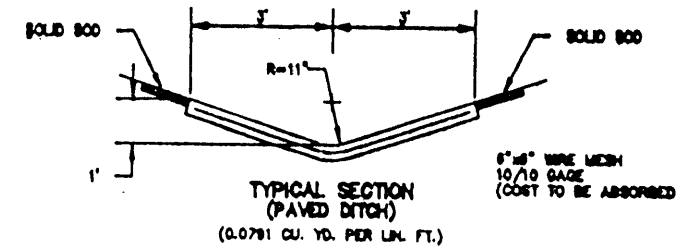


APPROACH GUARDRAIL LAYOUT

EXIT GUARDRAIL LAYOUT

CURB & GUTTER TRANSITION DETAIL AT BRIDGE ENDS.

ITEM	DESCRIPTION	UNIT	AMOUNT	PRICE	TOTAL
1	Excavate for curb & gutter	CY	...	...	...
2	1.5\"/>				
3	4.5\"/>				
4	6\"/>				
5	Install curb & gutter	LN FT	...	...	...



ITEM	DESCRIPTION	UNIT	AMOUNT	PRICE	TOTAL
1	Excavate for curb & gutter	CY	...	...	...
2	1.5\"/>				
3	4.5\"/>				
4	6\"/>				
5	Install curb & gutter	LN FT	...	...	...

ITEM	DESCRIPTION	UNIT	AMOUNT	PRICE	TOTAL
1	Excavate for curb & gutter	CY	...	...	...
2	1.5\"/>				
3	4.5\"/>				
4	6\"/>				
5	Install curb & gutter	LN FT	...	...	...

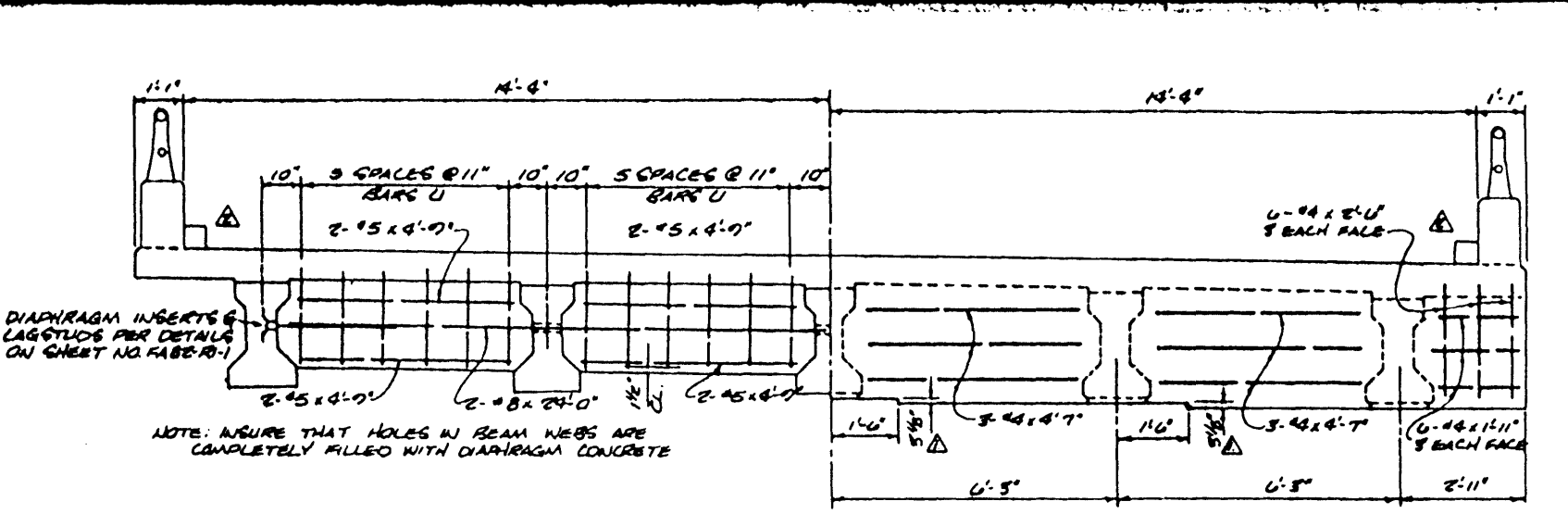
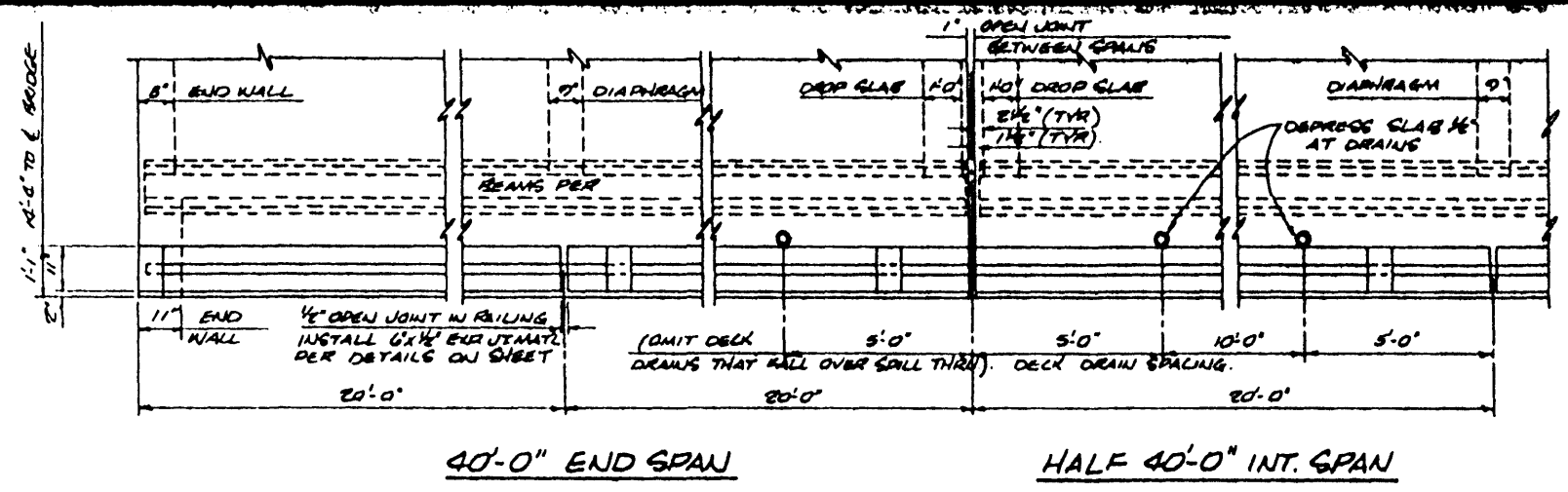
ITEM	DESCRIPTION	UNIT	AMOUNT	PRICE	TOTAL
1	Excavate for curb & gutter	CY	...	...	...
2	1.5\"/>				
3	4.5\"/>				
4	6\"/>				
5	Install curb & gutter	LN FT	...	...	...

DATE	REVISION	BY

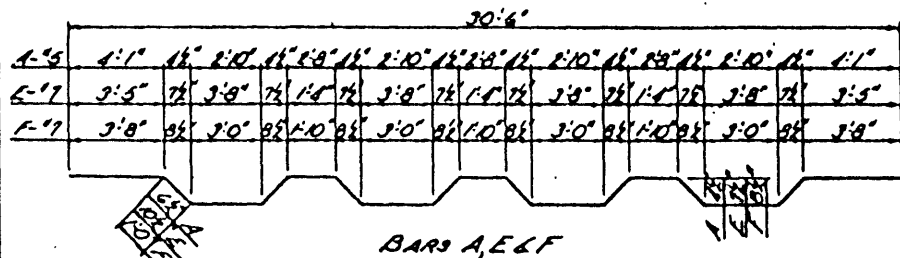
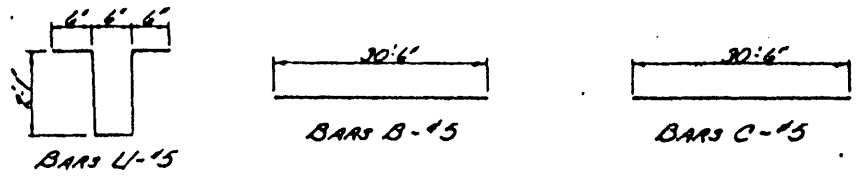
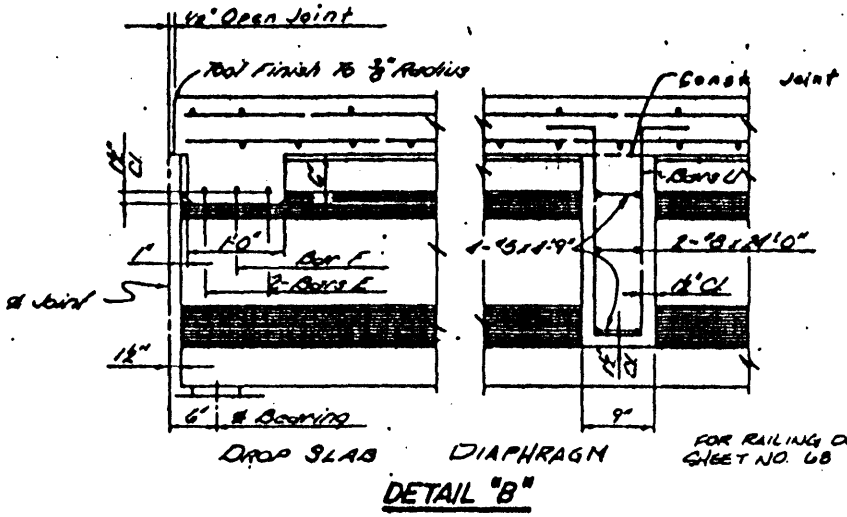
**SUMMERTREE PARKWAY
TYPICAL SECTION**

WASSONER ENGINEERING, INC.
Consulting Engineers - Jackson, Mo.

Drawn by: J.W.B.E. Date: November, 1989 SHEET NO. 64 OF 82
Checked by: J.T.K. Scale: As noted

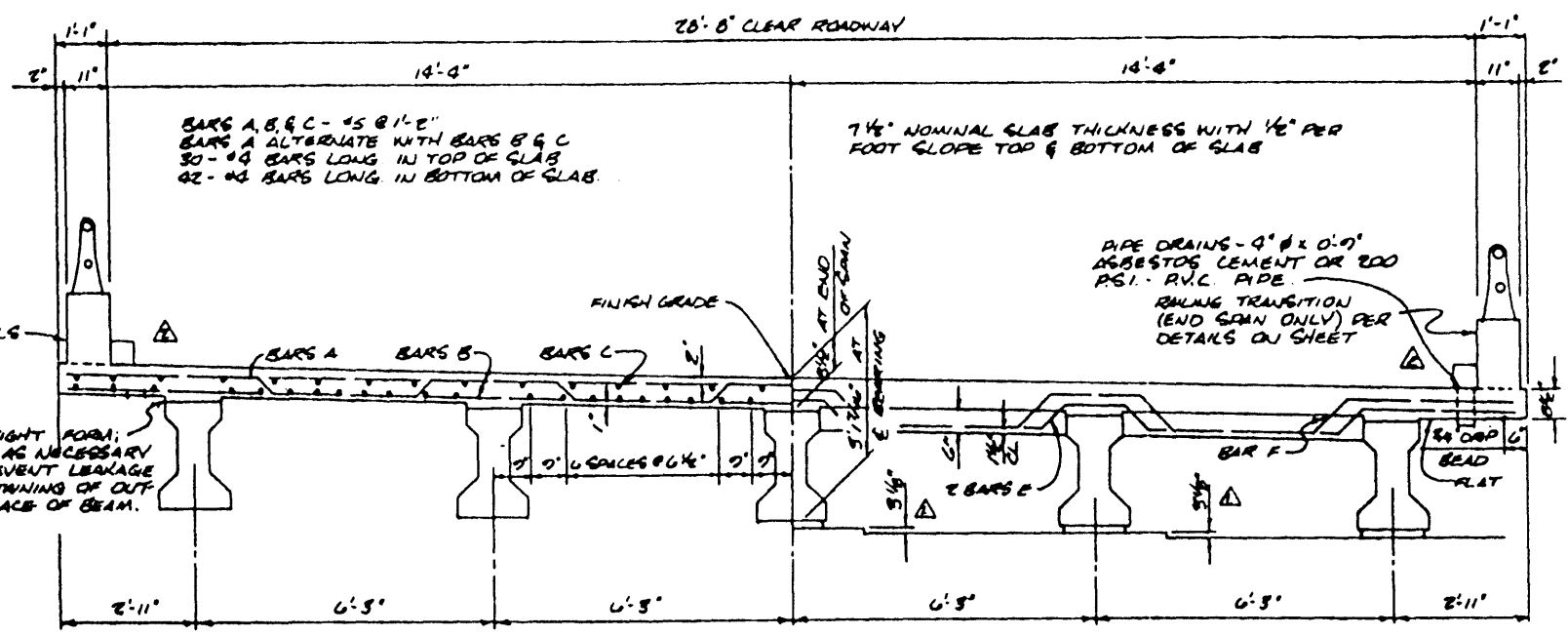


END SPAN		INT. SPAN	
NO.	QTY	NO.	QTY
01	90	01	108
02	8	01	108
03	10		
04	10		
05	90		
06	20		
07	8		



ITEM	UNIT	END SPAN	INT. SPAN
Concrete	Cu Yds	55.81	32.37
Reinforcing Steel	Lbs	7184	7267
Prestressed Beams	LIN FT	198.75	198.75
Railing	LIN FT	80	80

Final Payment Will Be Made On The Basis Of The Above Quantities Except Where This Plan Is Modified

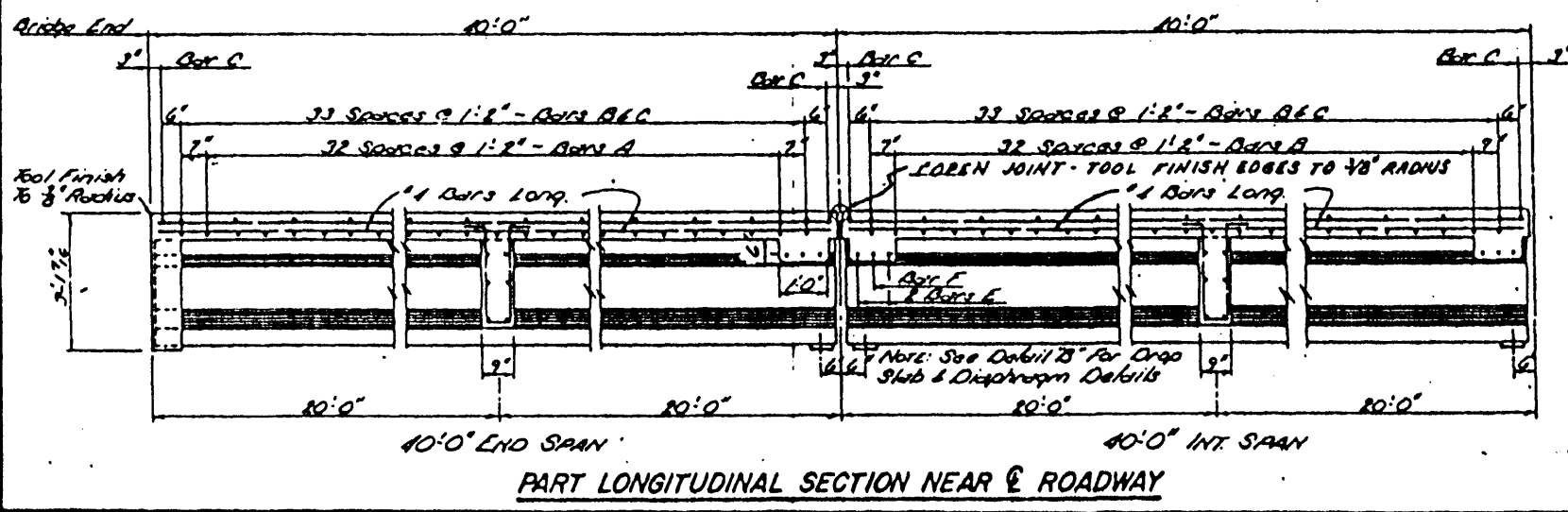


GENERAL NOTES:
 Specifications: Mississippi Standard Specifications for State Aid Road and Bridge Construction (1987 Edition).
 All Concrete Shall Be Class A.
 Concrete Surfaces Shall Be Finished In Accordance With Section S-801.23 Of The Specifications.
 All Concrete Edges Shall Be Chamfered 3/8" Except Where Otherwise Noted.
 Placing Dimensions For Reinforcing Steel To Concrete Surfaces Are Clear Dimensions.
 Prestressed Concrete Beams Must Be Maintained In An Upright Position At All Times And Must Be Picked Up From Designated Points. Failure To Pick The Beams Up In This Manner May Lead To The Collapse Of The Beam.
 The Dimensions Shown From Finish Grade To Cops Are Based On The Assumption The Original Camber Of The Beam Will Not Be Less Than 0 Nor More Than 1". The Engineer Shall Be Notified If The Camber Is Not Within These Limits.
 All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefor Will Be Considered Included In The Prices And Payments For Bid Items.

DESIGN DATA
 Specifications: AASHTO 1993
 Loading: HS20-44
 Slab Stresses: 18,000psi; 16,000psi; 14,000psi

STEEL QUANTITY FOR PARAPET WALL INCLUDED

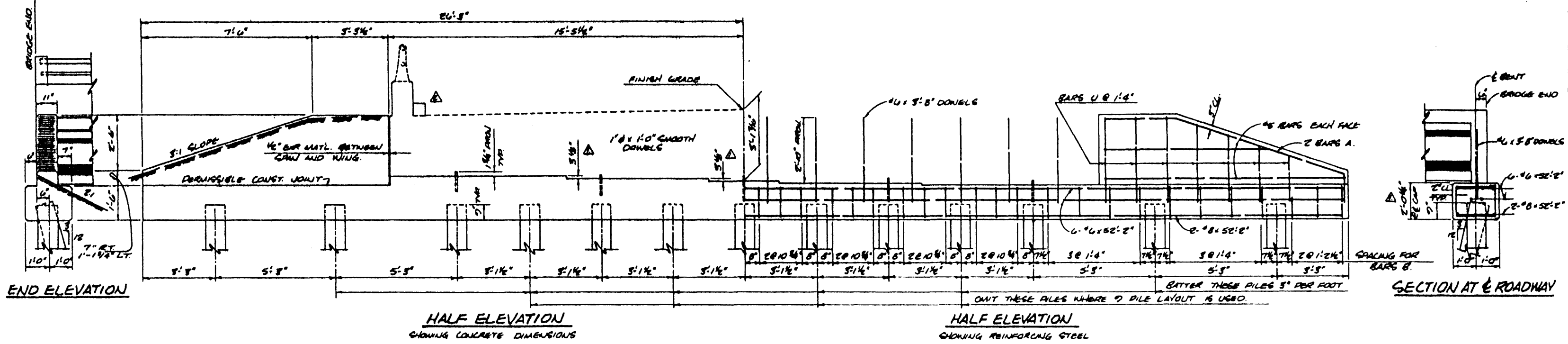
REVISION	DATE	BY



SUMMERTREE PARKWAY
40 FT. PRESTRESSED CONCRETE SPAN DETAILS

WAGGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Ms.

Drawn by: L.W. & E.G. Date: November, 1989 SHEET NO.
 Checked by: J.T.R. Scale: As noted 65 of 82



Note: Piles shall be of the size, type and number as shown on the layout sheet. Piles shall be driven to a minimum bearing capacity of 30 tons.

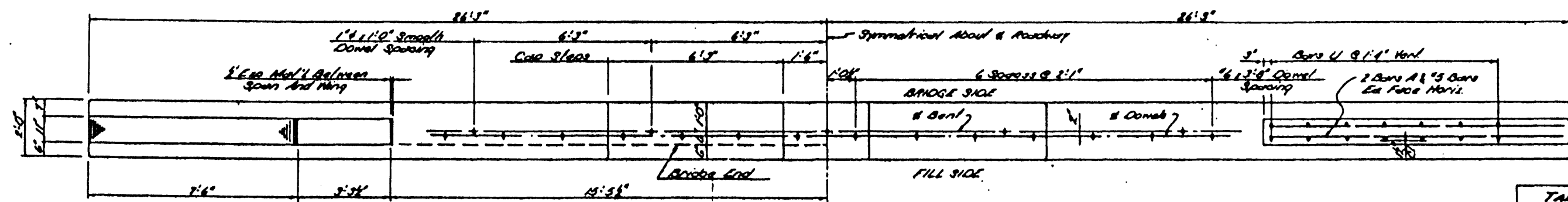


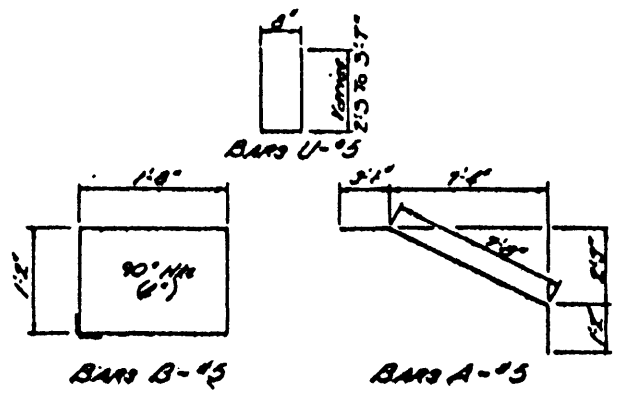
TABLE OF QUANTITIES		
ITEM	UNIT	QUANTITY
Concrete	Cu Yds	8.52
Rein Steel	Lbs	1553

Final Payment Will Be Made On The Basis Of The Above Quantities Except Where This Plan is Modified.

PLAN OF END BENT

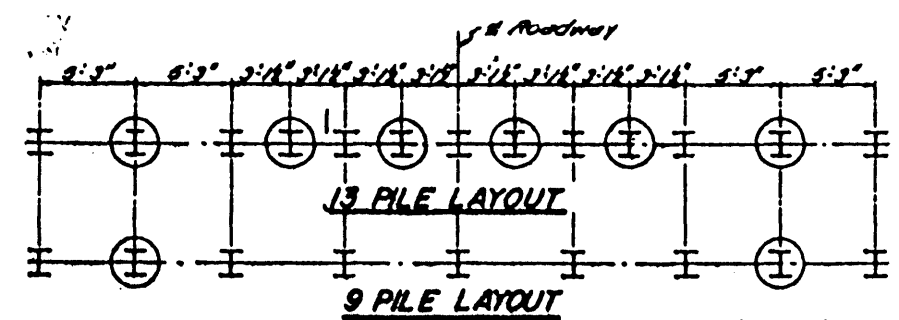
GENERAL NOTES:
 Specifications: Mississippi Standard Specifications for State Road and Bridge Construction (1987 Edition)
 All concrete shall be Class A Bridge Concrete
 All Exposed Surfaces shall be given a Uniform Rubbed Finish in accordance with Section 3-204.23 of the Specifications
 Chamer All Exposed Edges 3' Unless Otherwise Noted
 Piles shall Not Be Driven Until Bridge End fits Have been Constructed to Grade
 All Work for which No Pay Items are Provided in the Proposal Will Not Be Paid for Directly and Compensation Therefor Will Be Considered Included in the Prices and Payments for Bid Items

7/20/70 - REBASED CONCRETE QUANTITY - MLN.



BAR BENDING DETAILS
 Dimensions are cut to cut

Note: All Reinforcing Steel Details shall be in accordance with Manual of Standard Practices for Detailing Reinforced Concrete Structures.



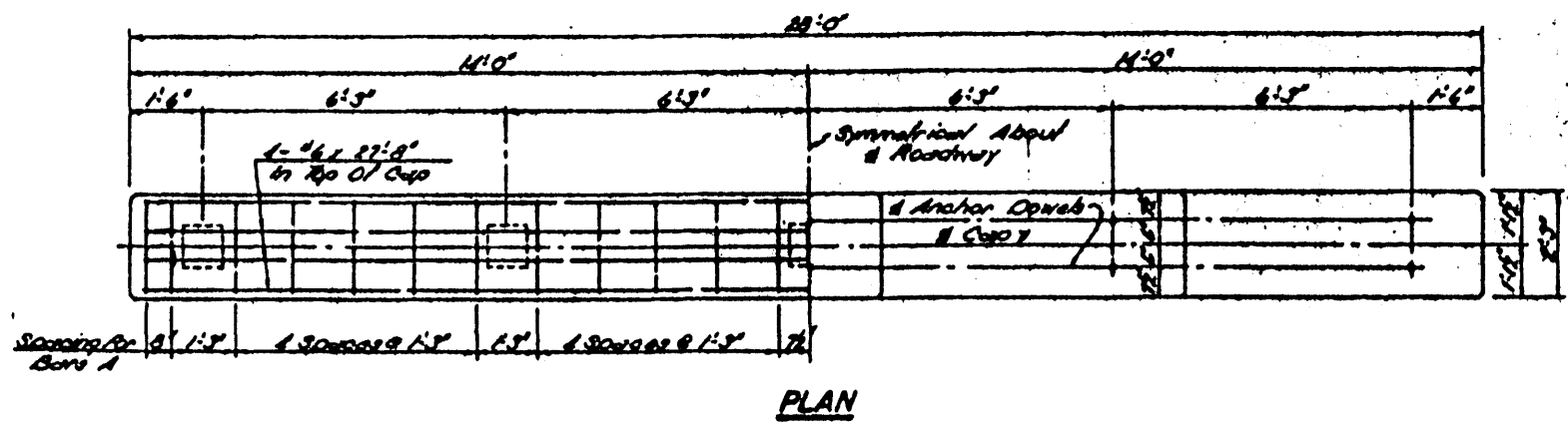
Enclosed Piles shall be Battered 3" Per Ft Number of Piles Will Be Shown On the Layout Sheet

DATE	REVISION	BY
	APPROVE	MLN
	DESIGNED	MLN
	CHECKED	MLN
	DESIGNED & CHANGED	MLN
	DESIGNED	MLN

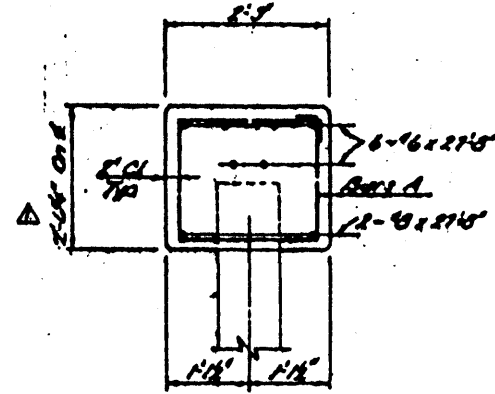
**SUMMERTREE PARKWAY
 END BENT
 FOR USE WITH
 40 FT. PRESTRESSED
 CONCRETE BEAM SPANS**

WAGGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Ms.

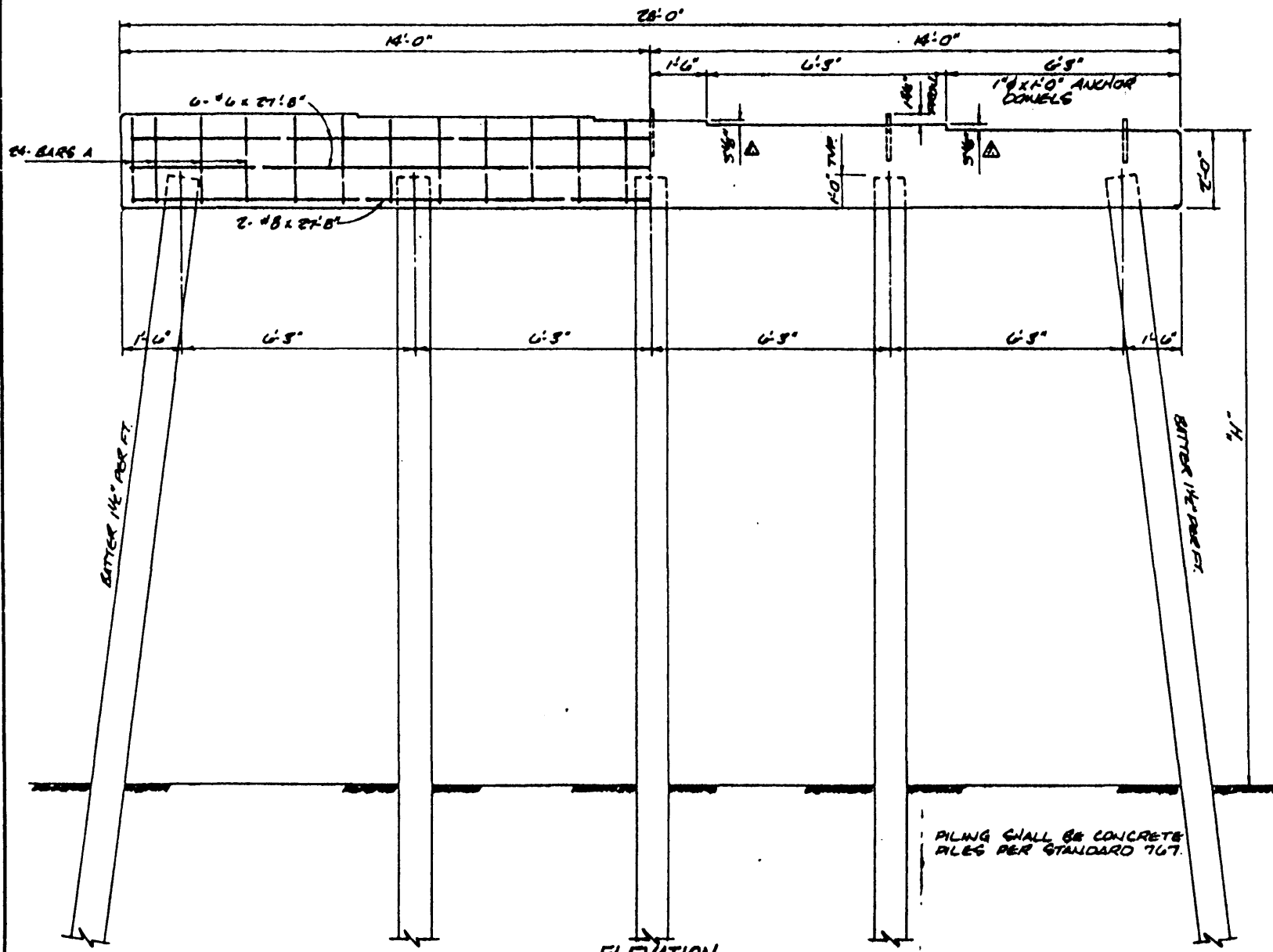
Drawn by: L.W. B.E.G.	Date: November, 1989	SHEET NO.
Checked by: J.T.K.	Scale: As noted	66 OF 82



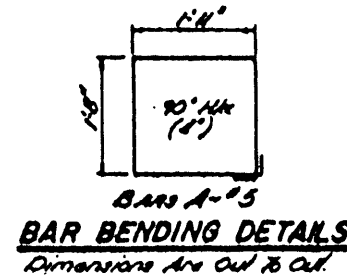
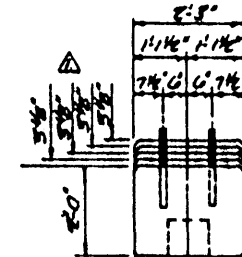
PLAN



SECTION NEAR E ROADWAY



ELEVATION
DRAWN FOR CONCRETE PILES



ESTIMATED QUANTITIES

BENT CAP	
Concrete	5.66
Reinforcing Steel	620.0

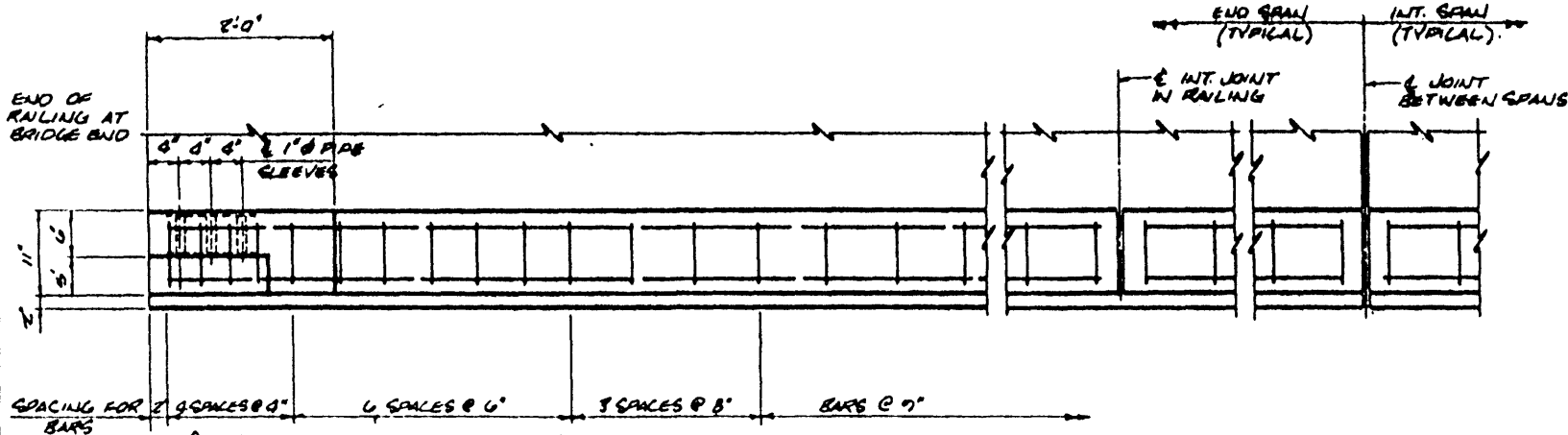
GENERAL NOTES:
 Specifications: Mississippi Standard Specifications for State Aid Road and Bridge Construction (1987 Edition)
 All Concrete Shall Be Class "A"
 All Exposed Concrete Surfaces Shall Be Finished in Accordance With Section 5-801.23 Of The Specifications
 All Concrete Edges Shall Be Chamfered 3", Except Where Noted
 Steel Piles Shall Be Driven Full Length And Shall Not Be Spliced Except By Authority Of The Engineer
 All Welding Shall Be Done By The Erector As Per Code M-A In Accordance With The American Welding Society Standard Specifications
 Steel Piling And Bracing Shall Be Shipped Unpainted But After Erection Shall Be Given Three Field Coats Of Paint As Follows: First Coat Red Lead Per Code R-1; Second And Third Coats Black Graphite Per Code M-B
 Piles Will Be Paid For At The Contract Price Per Linear Foot Complete In Place, And No Additional Payment Will Be Allowed For Painting Steel Piling Or Excavation Incidental To Encasement
 All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly, And Compensation Therefor Will Be Considered Included In The Prices And Payments For Bid Items

NO.	REVISION	DATE	BY
1	ADD BENT CAP		ALL
2	QUANTITIES		ALL
3	REV. QUANTITY		ALL

**SUMMERTREE PARKWAY
 INT: BENT
 FOR USE WITH
 40 FT. PRESTRESSED
 CONCRETE BEAM SPANS**

WAGNER ENGINEERING, INC.
 Consulting Engineers - Jackson, Ms.

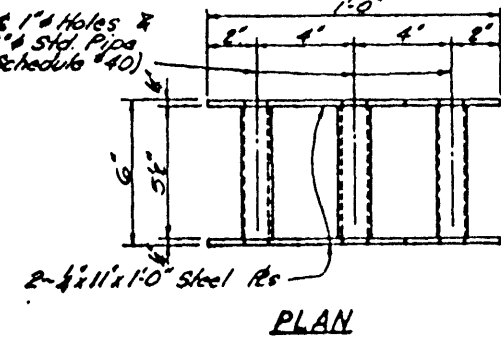
Drawn by: L.W. & C.S. Date: November, 1989 SHEET NO.
 Checked by: J.T.K. Scale: As Noted . 67 of 82



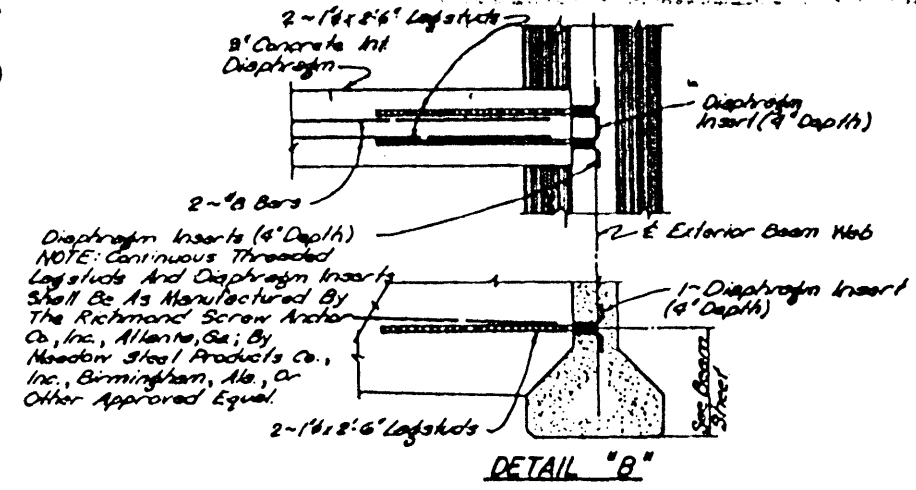
PART PLAN OF RAILING

NOTE: ALL BARS ARE #5
 NOTE REIN SHALL NOT BE CUT FOR PLACEMENT OF GUARDRAIL SLEEVE ASSEMBLY WITHOUT SPlicing BACK WITH BARS OF SAME SIZE AND DETAIL W/ 24 BAR DIAM SPLICE
 SEE END ELEVATION OF RAILING FOR 4'-4" x 4'-0" AT SLEEVE ASSEMBLY.

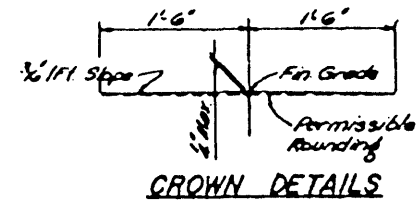
MATERIAL FOR GUARDRAIL ANCHOR SLEEVE ASSEMBLY:
 2-#5 1/2" x 1/2" x 1/2"
 4-1" x 0.35" Std Pipe (Schedule #40)
 Tack Weld to Plates At Each End. Plates Shall Be Of ASTM A36 Steel. Pipes Shall Be ASTM A120.
 Galvanize Complete Assembly After Fabrication Per AASHTO Mill.
 NOTE: Guardrail Anchor Sleeve Assembly Is Required At All Bridge End Railings. (Not A Pay Item)



PLAN

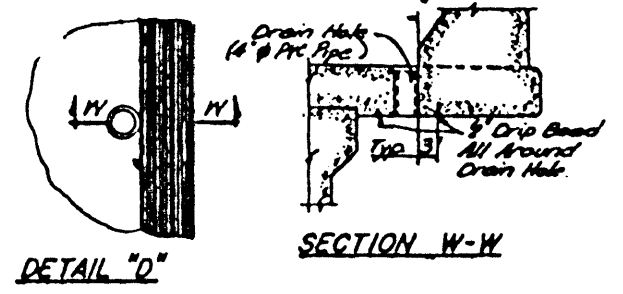


DETAIL "B"



CROWN DETAILS

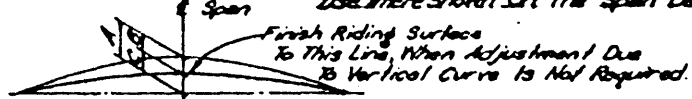
NOTE: Drain Holes Shall Be Located So That Bars B and C Will Not Be Cut.



DETAIL "D"

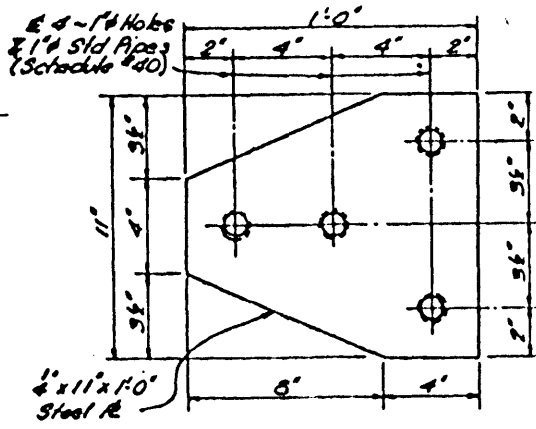
SECTION W-W

DRAIN HOLE DETAILS



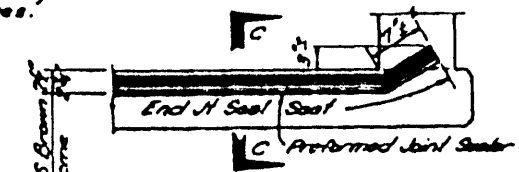
DEFLECTION DIAGRAM

A: Total Recommended Allowance For Deflection.
 B: Estimated Deflection Due To Dead Load Of Slab & Rail.
 C: A-B = Net Initial Camber In Riding Surface, Which Includes An Allowance For Creep.



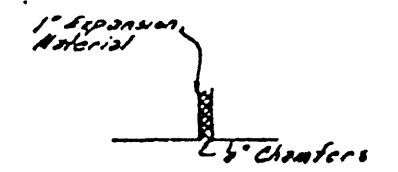
DETAIL OF GUARDRAIL ANCHOR SLEEVE ASSEMBLY

NOTE: Attach Securely To Forms Prior To Pouring Railing Concrete To Assure That Exposed Surfaces Of The Assembly Will Be Flush With Concrete Surfaces.

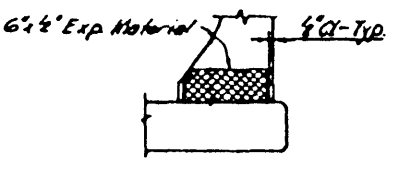


ELEVATION AT END OF SPAN

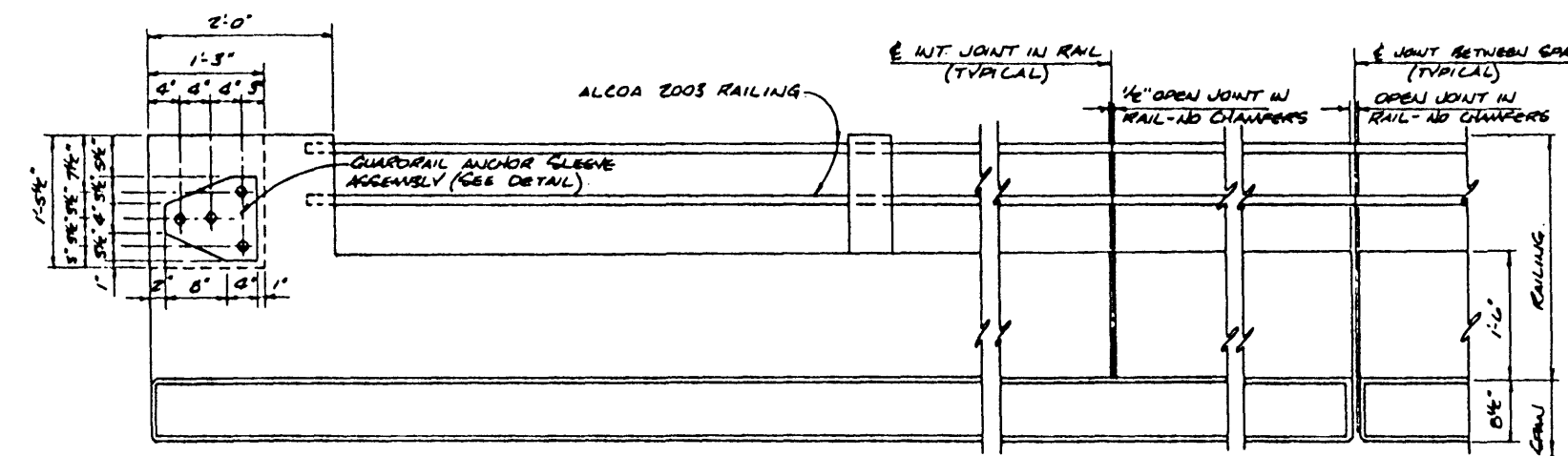
* Note: Joint Seal Details Do Not Apply Unless Called For On Bridge Layout Sheet (For Use On Overpass)



FINISH FOR EXPOSED EXPANSION MATERIAL

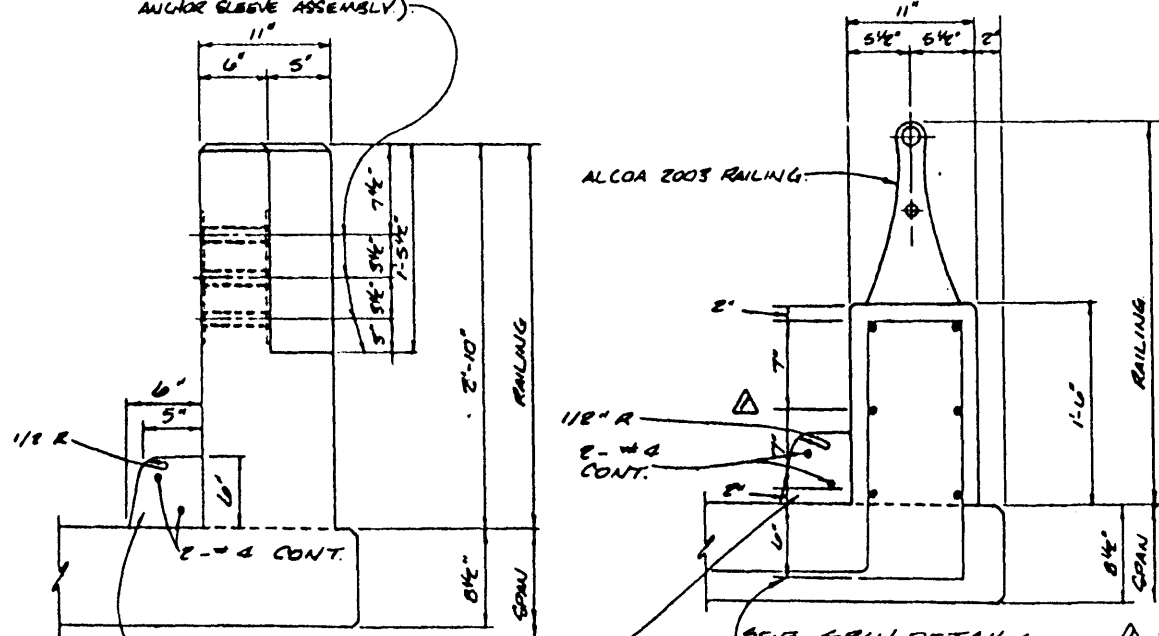


TYPICAL INT. JOINT DETAIL



PART ELEVATION OF RAILING

1" x 1" PIPE SLEEVES FOR GUARDRAIL ANCHOR BOLTS (SEE DETAIL OF GUARDRAIL ANCHOR SLEEVE ASSEMBLY)



TYPICAL SECTION OF RAILING

NOTE: ALL BARS ARE #5

END ELEVATION OF RAILING
 SHOWING CONCRETE DIMENSIONS AND DETAILS OF GUARDRAIL CONNECTION

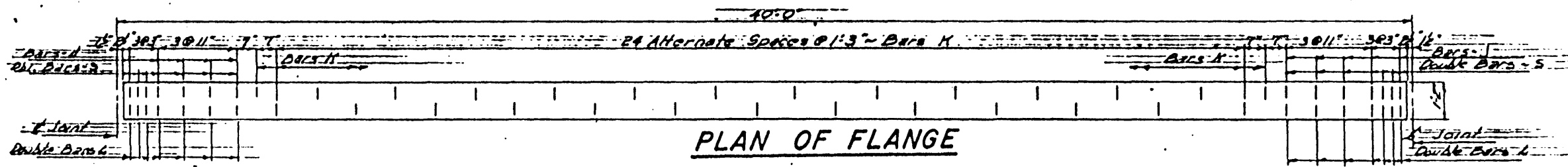
GENERAL NOTES:

All Concrete In Span And Railing Shall Be Class 'A' Chamfer All Edges 1/4" Unless Otherwise Noted. See Layout Sheet For Finishing Of Concrete Surfaces. Placing Dimensions For Reinforcing Steel To Concrete Surfaces Are Clear Distances. To Determine The Dimension From Finish Grade To Cap, The Assumption Is Made That The Compressed Thickness Of The Hoopcrete Pad Is 1/2". And That The Original Camber Of The Beams Will Be Within The Limits Shown On The Beam Detail Sheets. The Bridge Engineer Shall Be Notified If The Camber Is Not Within These Limits.

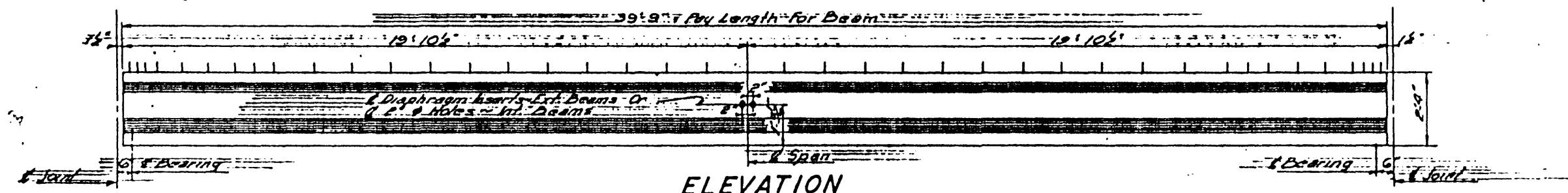
DATE	REVISIONS	BY

**SUMMERTREE PARKWAY
 RAILING & MISCELLANEOUS
 SPAN DETAILS**

WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Ms.		
Drawn by: L.W. & E.G.	Date: November, 1989	SHEET NO.
Checked by: J.T.K.	Scale: As Noted	68 OF 82

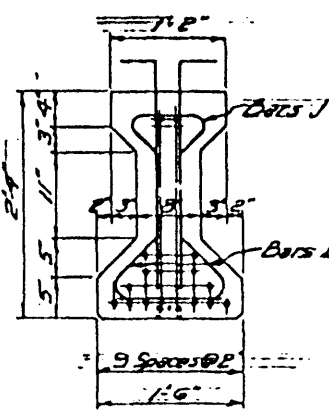


PLAN OF FLANGE

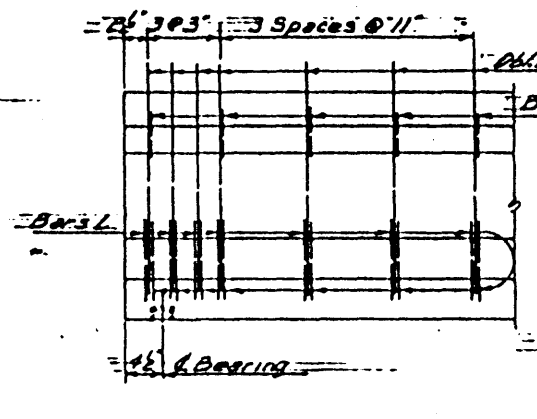


ELEVATION

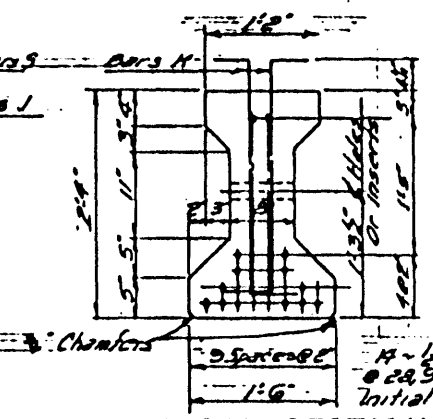
NOTE: Cut Strands Flush And Weatherproof With
 Lime Stone Colored "Thiokol" (Steel caps)
 Manufacturing (Co.) Or Other Approved Equal
 Applied According To Manufacturer's Directions



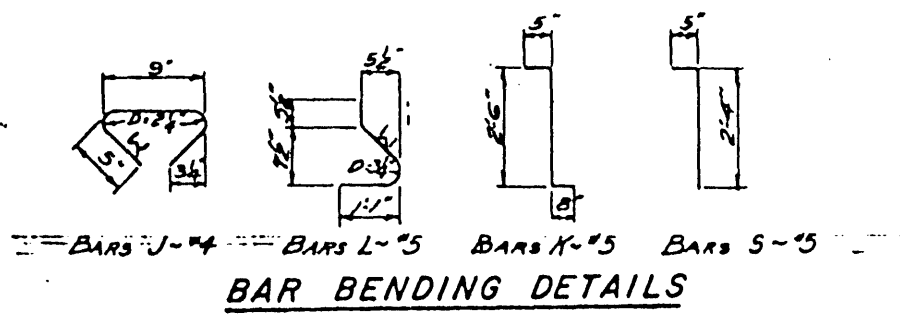
END ELEVATION



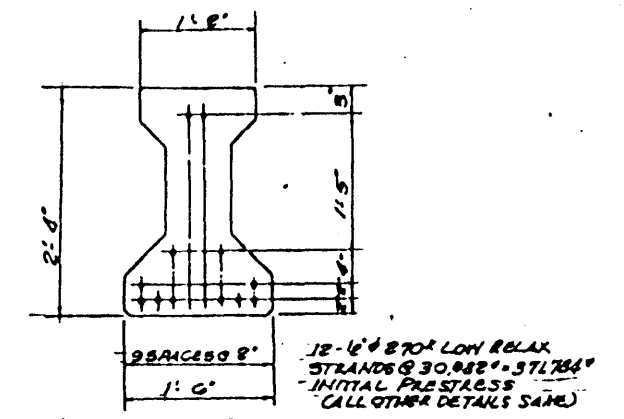
PART ELEVATION



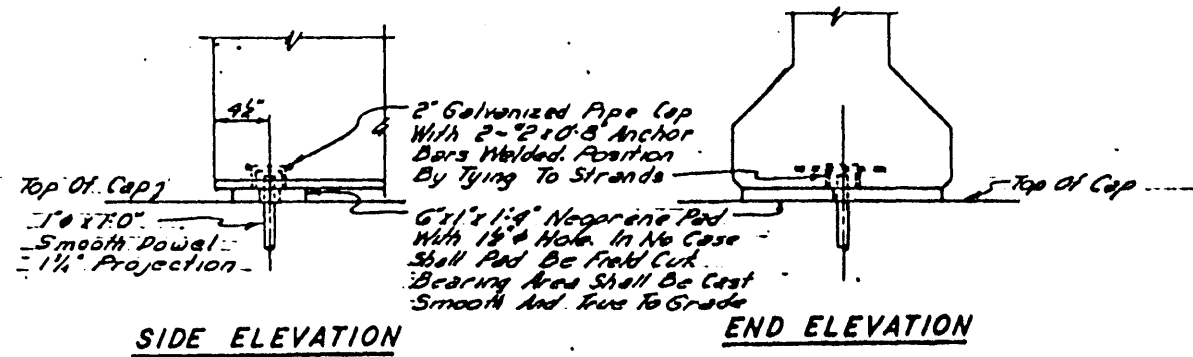
TYPICAL SECTION



BAR BENDING DETAILS



ALTERNATE PRESTRESS REQUIREMENTS



SIDE ELEVATION

END ELEVATION

BEARING DETAIL

GENERAL NOTES:
 Beams Shall Be Manufactured In Accordance With Mississippi Standard Specifications For State Aid Road And Bridge Construction (1987 Edition)
 Top Of Beams Shall Be Rough Floated. At Approximately The Time Of Initial Set, Entire Top Of Beams Shall Be Scrubbed Transversely To Remove All Lintage And To Produce A Roughened Surface For Bonding Slab. Other Surfaces Shall Be Finished Per Specifications.
 Concrete Shall Be Class "F" And
 (A) Shall Have A 28-Day Cylinder Strength Of 5000 psi
 (B) At Transfer Of The Retaining Load, Concrete Cylinder Strength Shall Be 4,000 psi.
 Prestressed S.P. Strands Shall Have A Minimum Ultimate Strength Of 41,300 LB And Shall Be Type 270 K.
 All Beams Shall Be Cast On Concrete Floor Pallets And In Metal Forms.
 Beams Must Be Maintained In An Upright Position At All Times During Handling And Must Be Picked Up From Designated Points. Disregard Of This Requirement May Lead To The Collapse Of The Beams.
 The Engineer Shall Be Notified If The Center Of The Beam Is Not Within The Limits Of Tolerance To 1."

DESIGN DATA
 Unit Stresses Are In Accordance With AASHTO, 1977

DATE	BY	REVISIONS
5-88	JIC	1-01
5-88	JIC	1-02
12-82	JIC	1-03

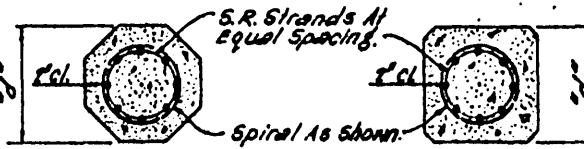
STATE AID DIVISION
 MISSISSIPPI STATE HIGHWAY DEPARTMENT
 SUMMERTREE PARKWAY
 40 FT.
 PRESTRESSED CONCRETE
 BEAM DETAILS
 WAGGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Ms.

DETAILED *JIC* CHECKED *JIC*
 TRACED *JIC* DATE: 12-82

FAB2-40-PS

ALTERNATE DETAILS FOR SPIRAL STRAND PATTERN (FOR USE WITH ALTERNATE SECTIONS)

Pile Size	OCTAGONAL PILE			SQUARE PILE		
	1/2" A 416	3/4" A 416	1" A 416	1/2" A 416	3/4" A 416	1" A 416
12"	6	5	4	6	5	4
14"	8	7	5	8	7	5
16"	10	9	7	11	9	7
18"	13	11	8	15	13	10



ALTERNATE SECTIONS
NOTE: Alternate Sections Will Be Permitted Only As Noted On Bridge Layout Sheet.



PERMISSIBLE STEEL DRIVING TIP FOR 14"x14" PILE

** NOTE: End Of Steel Driving Tip Shall Be Reinforced With Welded Plates If Required By Driving Conditions.



PERMISSIBLE STEEL DRIVING TIP FOR 16"x16" PILE

NOTE: Steel Driving Tips May Be Built-Up Sections Such As Angles Back To Back, R.R. Rails, etc. Equivalent To The Sections Shown, Subject To Approval Of The Bridge Engineer.

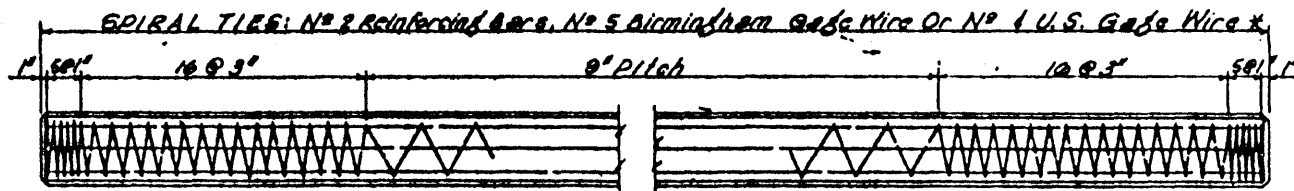


PERMISSIBLE STEEL DRIVING TIP FOR 18"x18" PILE

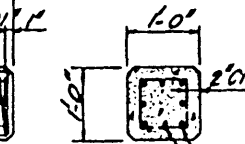
GENERAL NOTES:

Specifications: Mississippi State Highway Department, 1976, With Particular Attention Directed To Sections 109, 203 & 204.
Spiral Ties Shall Be Tied To All Corner Strands For Square Patterns And To 4 Strands Per Turn In Circular Patterns.
All Corners Of Square Piles Shall Be Chamfered Uniformly, Not Less Than 1" Nor More Than 1 1/2".
Wire Ties Shall Be Cold-Drawn Steel Wire A.S.T.M. A62--(A.A.S.H.O. M32).
Steel Driving Tip May Be Used When Required By Driving Conditions To Obtain Penetration.

* No 5 U.S. Gage Wire May Be Used Provided The 8" Pitch Shown Is Reduced To 6".



12"x12" PRESTRESSED PILES



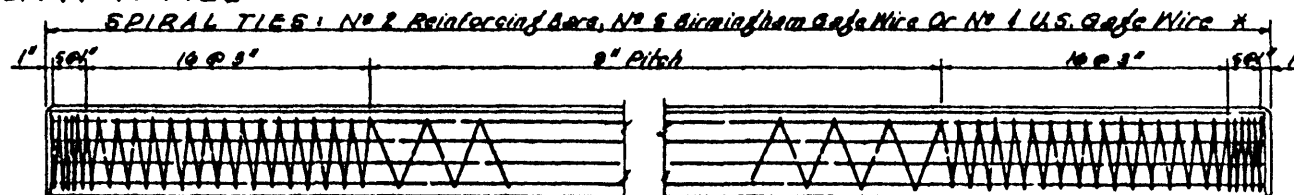
SECTION



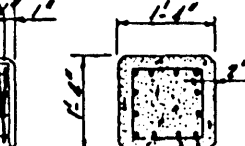
14"x14" PRESTRESSED PILES



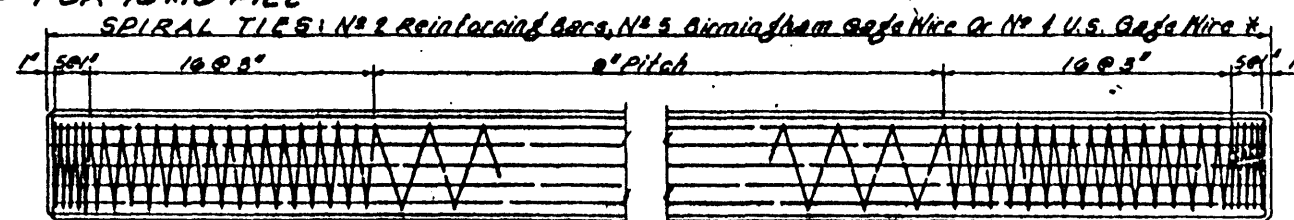
SECTION



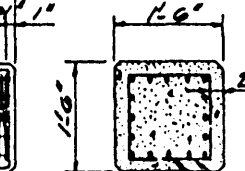
16"x16" PRESTRESSED PILES



SECTION



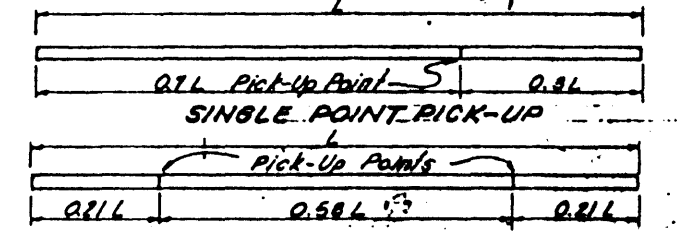
18"x18" PRESTRESSED PILES



SECTION

MAXIMUM PILE LENGTHS

SIZE	Type	OCTAGONAL		SQUARE	
		Circular Core	Circular Core	Square Core	Square Core
12"	Single	47'	51'	54'	54'
	Double	67'	75'	78'	78'
14"	Single	50'	57'	57'	57'
	Double	73'	82'	82'	82'
16"	Single	55'	60'	60'	60'
	Double	78'	85'	85'	85'
18"	Single	57'	64'	64'	64'
	Double	81'	90'	90'	90'



NOTE: Piles Shall Be Marked At Pick-Up Points To Indicate Proper Place For Attaching Handling Lines And For Blocking. (Pick-Up Points Shall Be Marked With Removable Band Of Paint.)

① CONCRETE PILE SPLICE
A Precast Section May Be Spliced By Providing Cored Or Drilled Dowel Holes On Both Sides Of The Splice. The Dowels Shall Have An Area Equal To 1% Of The Gross Cross-Section Of The Pile And Shall Be Accurately Spaced Into Both Sections. The Dowel Holes And Space Between Splice Sections Shall Be Filled With A Material Having Properties Equal To Those Of The Concrete And Adhesive Strength Equal To The Shear And Tensile Strength Of The Concrete. Details To Be Reviewed By The Engineer.

② BUILD-UP (Without Driving):
Concrete Around Top Edge Of Pile Shall Be Bushhammered To Prevent Feathered Edges.
The Minimum Area Of Reinforcing Steel Shall Be 1% Of The Gross Cross-Section Of Concrete. Placement Of Bars Shall Be In A Symmetrical Pattern Of Not Less Than Four Bars.

③ BUILD-UP (With Driving):
TYPICAL SPLICE & BUILD-UP DETAILS

NOTE: All Details On This Drawing Are In Accordance With A.A.S.H.O.-P.C.I. COMMITTEE RECOMMENDATIONS, Submitted With Letter From Mr. T.H. Jennings, Chairman. Dated July 10, 1965.
NOTE: THIS DRAWING REPLACES DRAWING NO. CP-201, HOWEVER THE USE OF PILES MANUFACTURED PER DRAWING CP-201 PRESENTLY IN STOCK WILL BE PERMITTED.

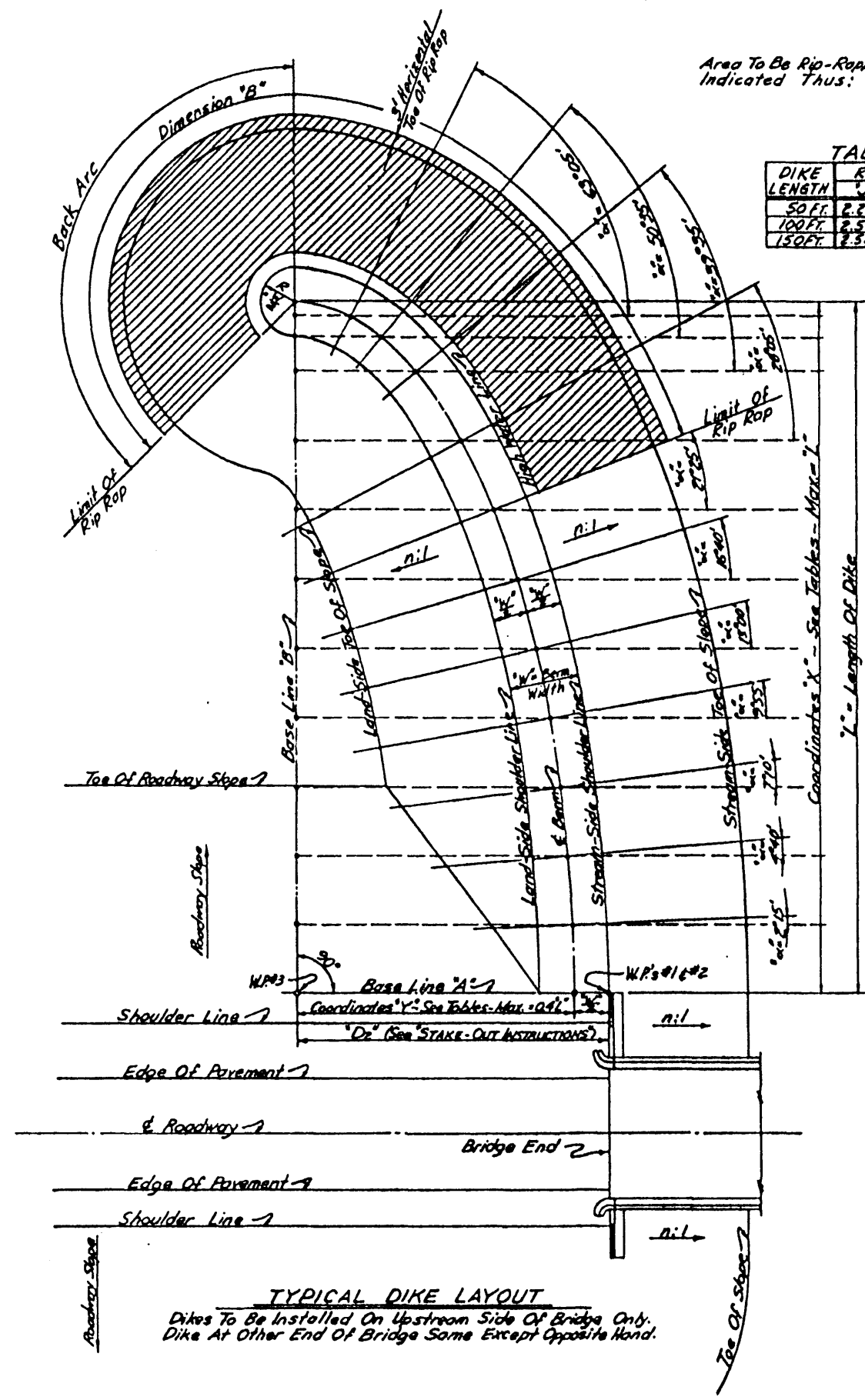
DESIGNER	REVIEWED	NOTE	DATE
		GENERAL SPECIFICATION	
		NOTE	

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SUMMERTREE PARKWAY
PRESTRESSED TYPE
PRECAST CONCRETE PILES

WABSONER ENGINEERING, INC.
Consulting Engineers - Jackson, Miss.

CP-21
767



Area To Be Rip-Rapped Indicated Thus:

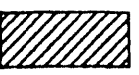


TABLE 'A'
RIP RAP CONSTANTS

DIKE LENGTH	J	K	P
50 FT.	2.2654	33.21	3.40
100 FT.	2.5272	58.92	3.79
150 FT.	2.3272	81.39	3.79

50 FT. DIKE
BERM WIDTH W = 12 FT.
BACK ARC = 120°
L = 50 FT.

COORDINATES

X	Y
0.00	20.00
5.00	18.90
10.00	17.60
15.00	16.09
20.00	14.33
25.00	12.32
30.00	10.00
35.00	7.28
40.00	4.12
45.00	0.25
50.00	0.00

100 FT. DIKE
BERM WIDTH W = 12 FT.
BACK ARC = 135°
L = 100 FT.

COORDINATES

X	Y
0.00	40.00
15.00	39.80
30.00	39.19
45.00	38.16
60.00	36.66
75.00	34.64
90.00	32.00
105.00	28.57
120.00	24.00
135.00	17.94
150.00	12.42
165.00	7.96
180.00	0.00

150 FT. DIKE
BERM WIDTH W = 15 FT.
BACK ARC = 135°
L = 150 FT.

COORDINATES

X	Y
0.00	60.00
15.00	59.70
30.00	58.73
45.00	57.24
60.00	54.99
75.00	51.96
90.00	48.00
105.00	42.83
120.00	36.00
135.00	28.15
150.00	19.74
165.00	11.94
180.00	0.00

TO ESTIMATE QUANTITY OF EMBANKMENT MATERIAL:
The Volume Of Embankment Material, In Cubic Yards, Is Determined By The Following Formula:

$$V = .0426 \times L \times h \times [W + (nh)]$$

Where L is The Dike Length, In Feet; h is The Difference In Elevations Of The Berm And The Average Ground Level; W is The Berm Width, In Feet; And n:1 Is The Dike Slope.

TO ESTIMATE QUANTITY OF RIP RAP:

Dimension B gives The Length Along The Stream-Side Face At Any Distance, h, Below The Berm, And b Is Measured From The Line Where $\alpha = 21^\circ 25'$ Around The End To The "Back Arc" Rip Rap Limit. It Is Determined By The Following Formula:

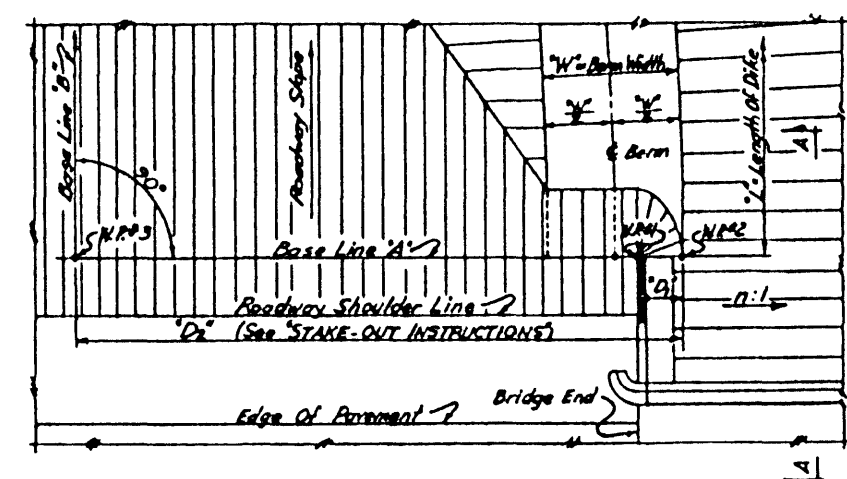
$$B = (J \times n \times h) + K$$

Where J & K Are Constants, From Table 'A', And n:1 Is The Dike Slope. The Area Of Rip Rap Is Determined As Follows:

- Find The Mean Length At Mid-Height Of The Rip Rap Section = Length At High Water Elevation Plus Length At Average Ground Elevation + 2.
 - Multiply The Difference In Elevations Of High Water And Average Ground Level By "M" (For 2:1 Slope, M = 2.236; For 3:1 Slope, M = 3.162) To Find The Slant Height On Slope.
 - Area Of Rip Rap On Slope = Mean Length (a) x Slant Height (b) In Square Feet.
 - Find The Mean Length Of The Three Foot Horizontal Toe Portion = Length At Average Ground Level, Used In (a), Plus "P" From Table 'A'.
 - Area Of Toe Portion = Mean Length (d) x 3, In Square Feet.
 - Total Rip Rap Area Is The Sum Of The Slope Area (c) And The Toe Area (e).
- Having Total Rip Rap Area, Tons Of Loose Rip Rap May Be Estimated At 150 Lb. Per Square Foot Of Area (Based On Loose Rip Rap 1.25 Foot Thick Weighing 120 Lb. Per Cubic Foot).

STAKE-OUT INSTRUCTIONS:

- W.P.#1 Is Located At The Land-Side Corner Of The Upstream End Bent Wing Wall, Unless Otherwise Specified. Establish Base Line "A" Passing Thru W.P.#1 And Parallel To & Roadway. When & Roadway Is On Horizontal Curve, Base Line "A" Is Parallel To The Tangent Of & Roadway At A Joint (Or End Of Span) At Bridge End. Where Skewed Dike Is Required, Rotate Base Line "A" About W.P.#1 Thru The Angle Of Skew.
- (a) Unless Otherwise Specified, Assume The Berm Elevation, E_B, To Be Equal To The Roadway Slope Elevation, E_S, At W.P.#1. In All Cases Where E_B = E_S, W.P.#2 Coincides With W.P.#1 As Shown In "TYPICAL DIKE LAYOUT." For Bridges Where Elevations E_B Are Not The Same At Both Bridge Ends, Set Elevation E_B For Both Dikes Equal To The Lower Grade.
- (b) For Dikes Where The Berm Is To Be Set At An Elevation, E_B, Other Than Elevation E_S, Establish W.P.#2 Along Base Line "A" Distance, D₁, Streamward (Upward, If Negative) From W.P.#1, Where $D_1 = n(E_S - E_B)$ And n:1 Is The Dike Slope. See DETAIL 'A' Below.
- Measure Landward From W.P.#2 Along Base Line "A" A Distance, D₂, To Establish W.P.#3, The Zero Of Base Line "B", Where $D_2 = \frac{W}{3} + Y_0$ W is The Berm Width, And Y₀ Is The Distance Y Given In The Tables For X = 0.
- At W.P.#3 Turn 90° Upstream From Base Line "A" To Establish Base Line "B". Locate The X Coordinates Along Base Line "B". And, At Right Angles To Base Line "B" Thru These Points, Measure Corresponding Y Coordinates To Establish Points On & Berm.
- At Each Point Thus Obtained On & Berm, Turn Corresponding Angle, α, And Set:
 - Stream-Side Shoulder Line, At Half The Berm Width From & Berm.
 - Stream-Side Top Of Slope, From The Preceding Point.
 - Land-Side Shoulder Line, At Half The Berm Width From & Berm.
 - Land-Side Top Of Slope, From The Preceding Point.



DETAIL 'A'
Showing Location Of Working Points For Staking Out Dike When Berm Elevation (E_B) Is Below Slope Elev (E_S) At W.P.#1.

GENERAL NOTES:

- The Slope Of The Dike Embankment Shall Be The Same As The Slope (n:1) Of The Fill Under The Bridge Unless Specified Otherwise On Bridge Layout Sheet.
- Embankment Material For Earth Dikes Will Be Included In Excavation Quantities As Shown On The Plans.
- Unless otherwise noted on the plans and/or to meet other contract requirements, rip rap shall be required on all earth dikes as shown hereon.
- Sprigging, When Required, Will Be Included In Regular Roadway Sprigging Quantities.
- Sodding, When Required, Will Be Included In Regular Roadway Sodding Quantities.

TYPICAL DIKE LAYOUT
Dikes To Be Installed On Upstream Side Of Bridge Only. Dike At Other End Of Bridge Same Except Opposite Hand.

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SUMMERTREE PARKWAY SPUR DIKE: EARTH DETAIL

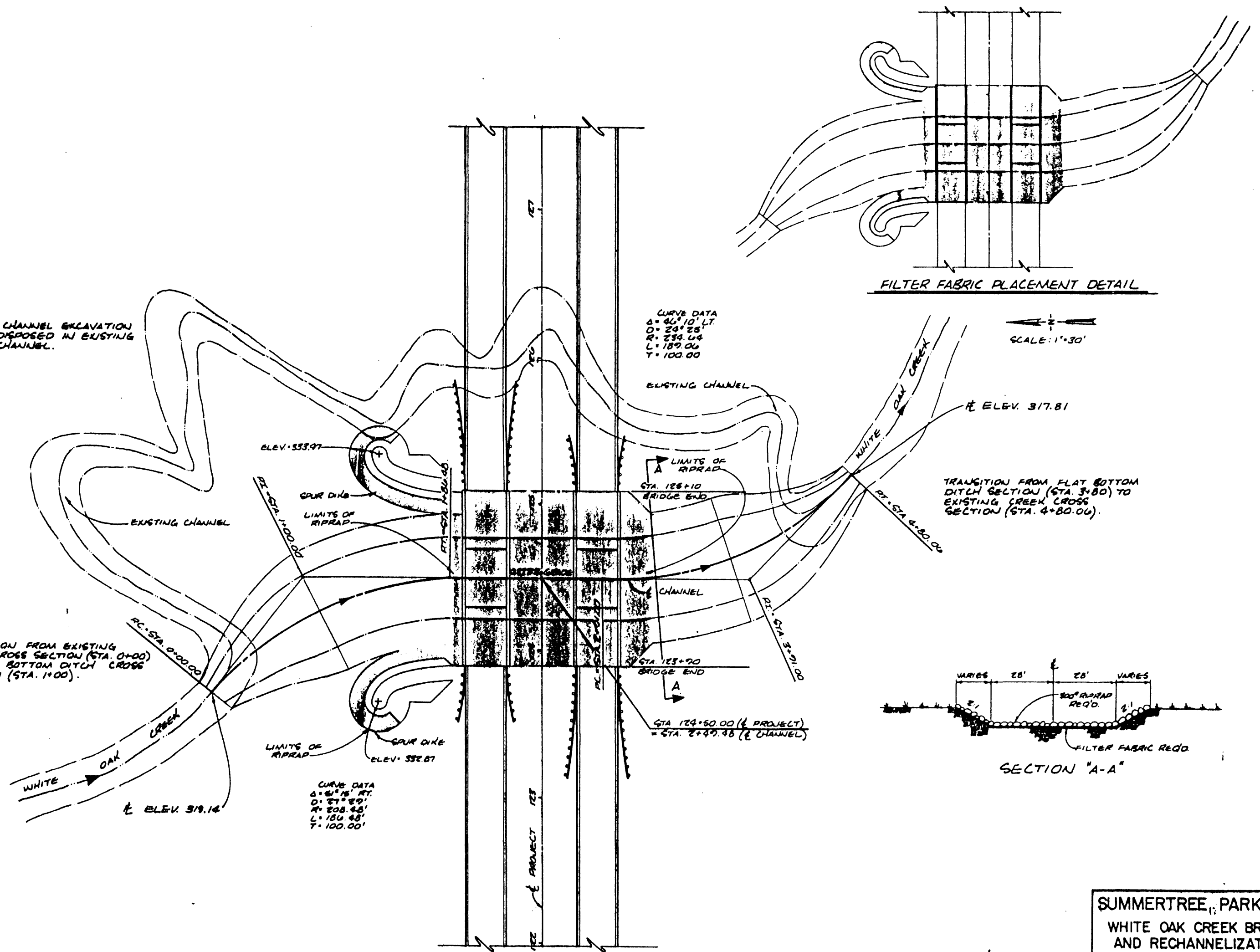
WAGGONER ENGINEERING, INC.
Consulting Engineers - Highway, Inc.

WORKING NUMBER: ED-1
SHEET NUMBER: 205

DATE: DESIGNED: CHECKED: DATE: 11-1-79

NOTE:
CREEK CHANNEL EXCAVATION
TO BE DEPOSED IN EXISTING
CREEK CHANNEL.

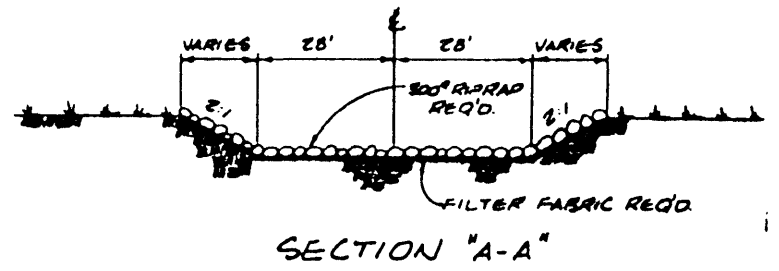
TRANSITION FROM EXISTING
CREEK CROSS SECTION (STA. 0+00)
TO FLAT BOTTOM DITCH CROSS
SECTION (STA. 1+00).



FILTER FABRIC PLACEMENT DETAIL

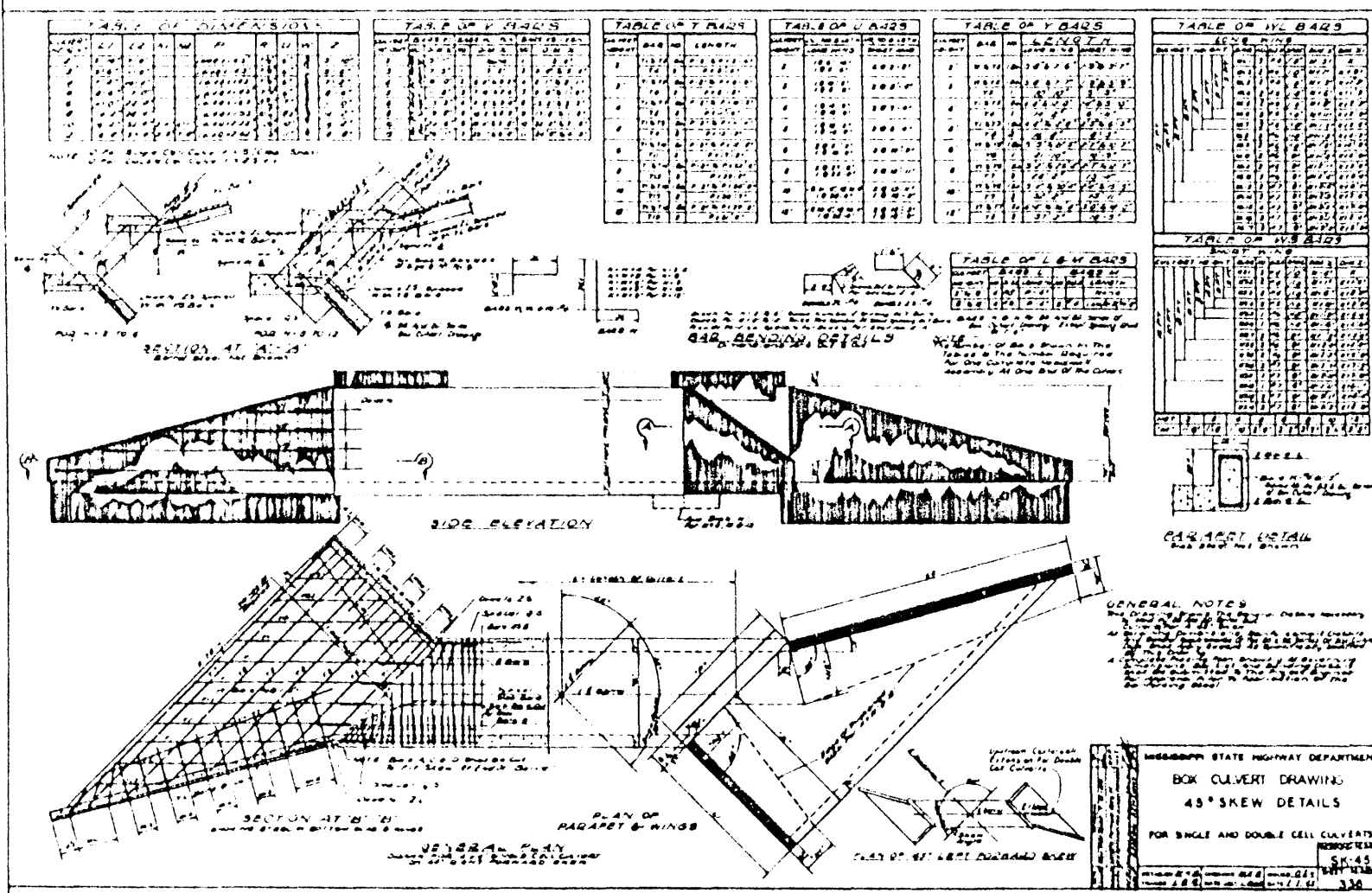
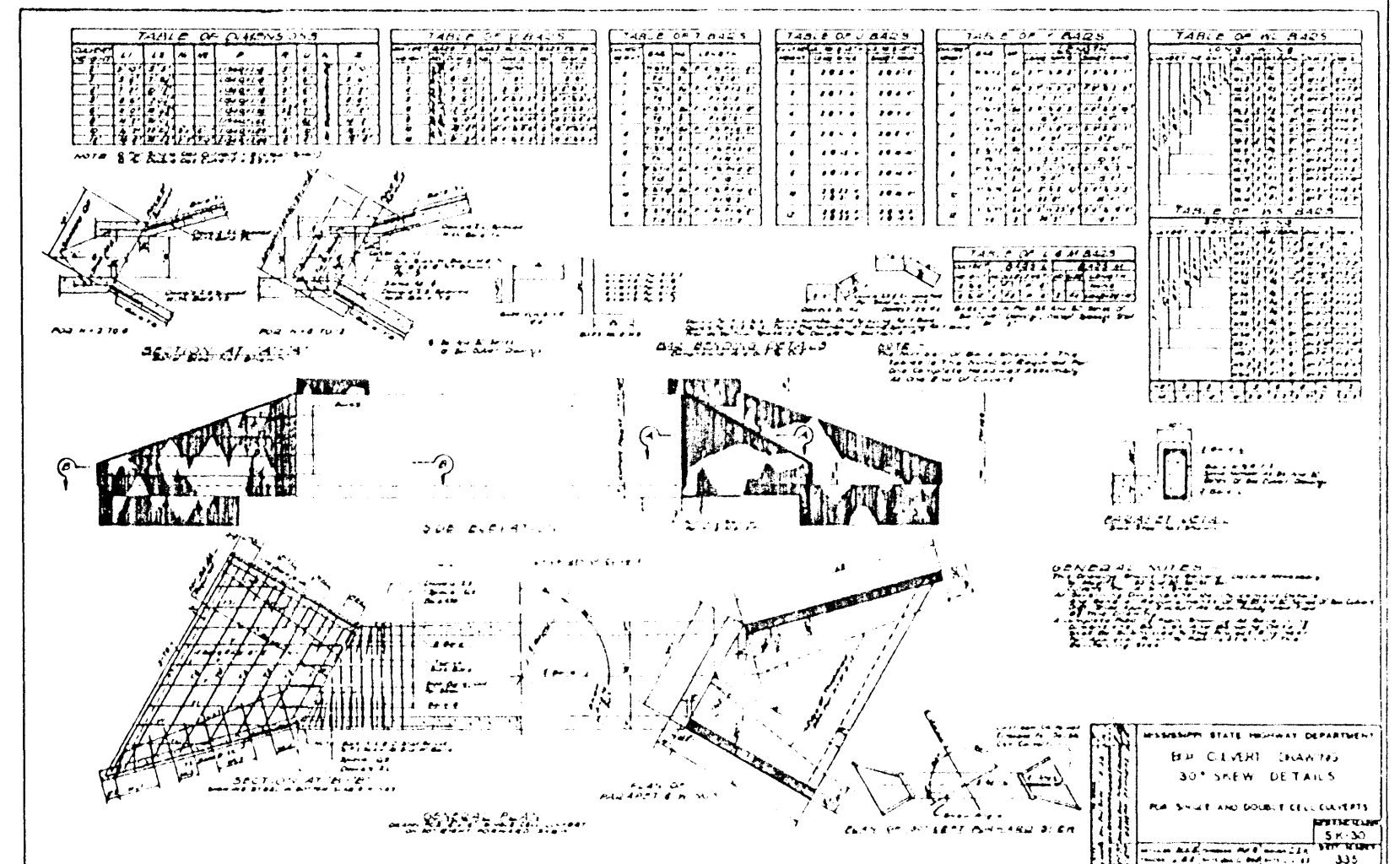
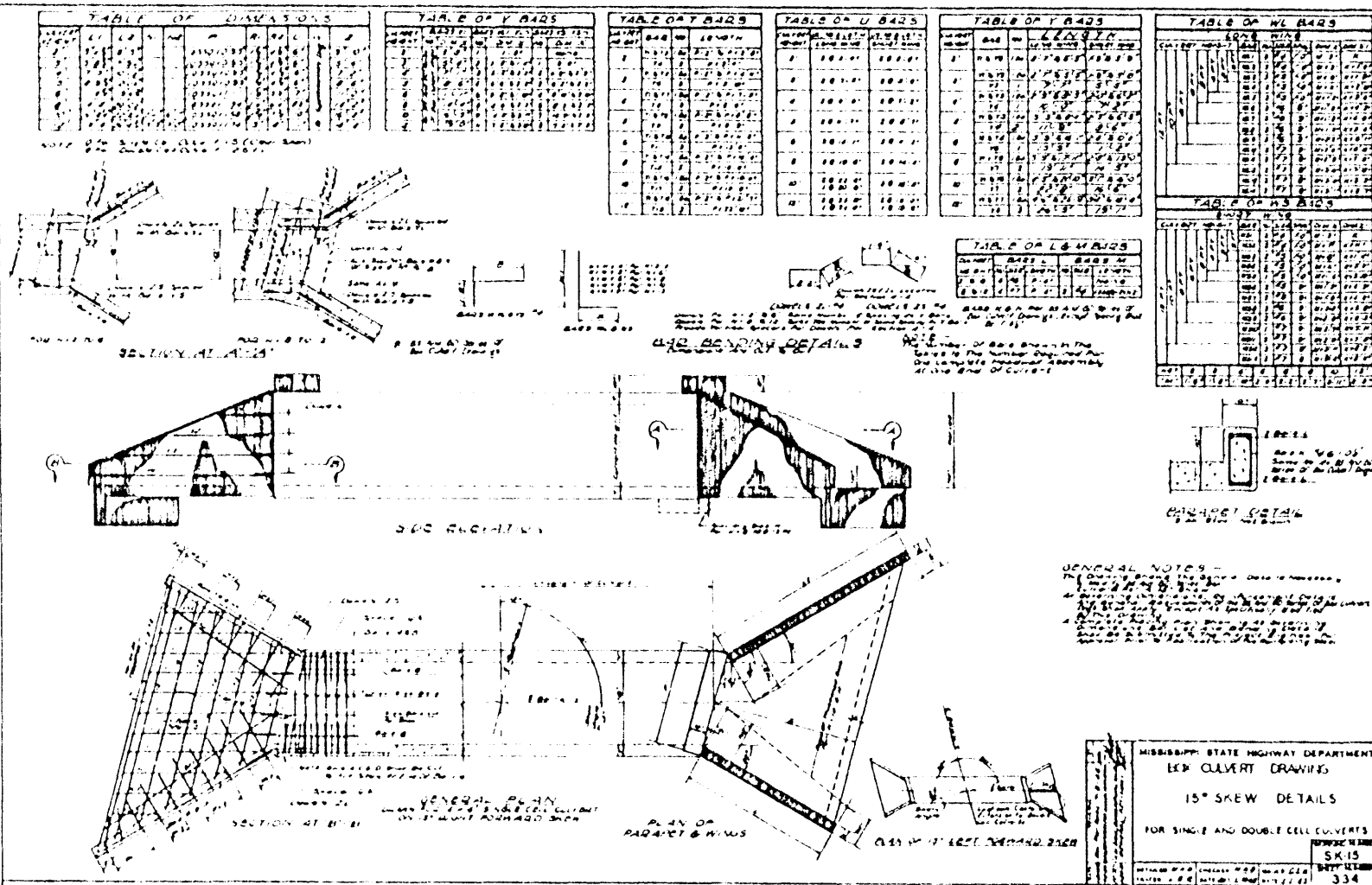
SCALE: 1"=30'

TRANSITION FROM FLAT BOTTOM
DITCH SECTION (STA. 3+80)
TO EXISTING CREEK CROSS
SECTION (STA. 4+80.00).



**SUMMERTREE PARKWAY
WHITE OAK CREEK BRIDGE
AND RECHANNELIZATION**

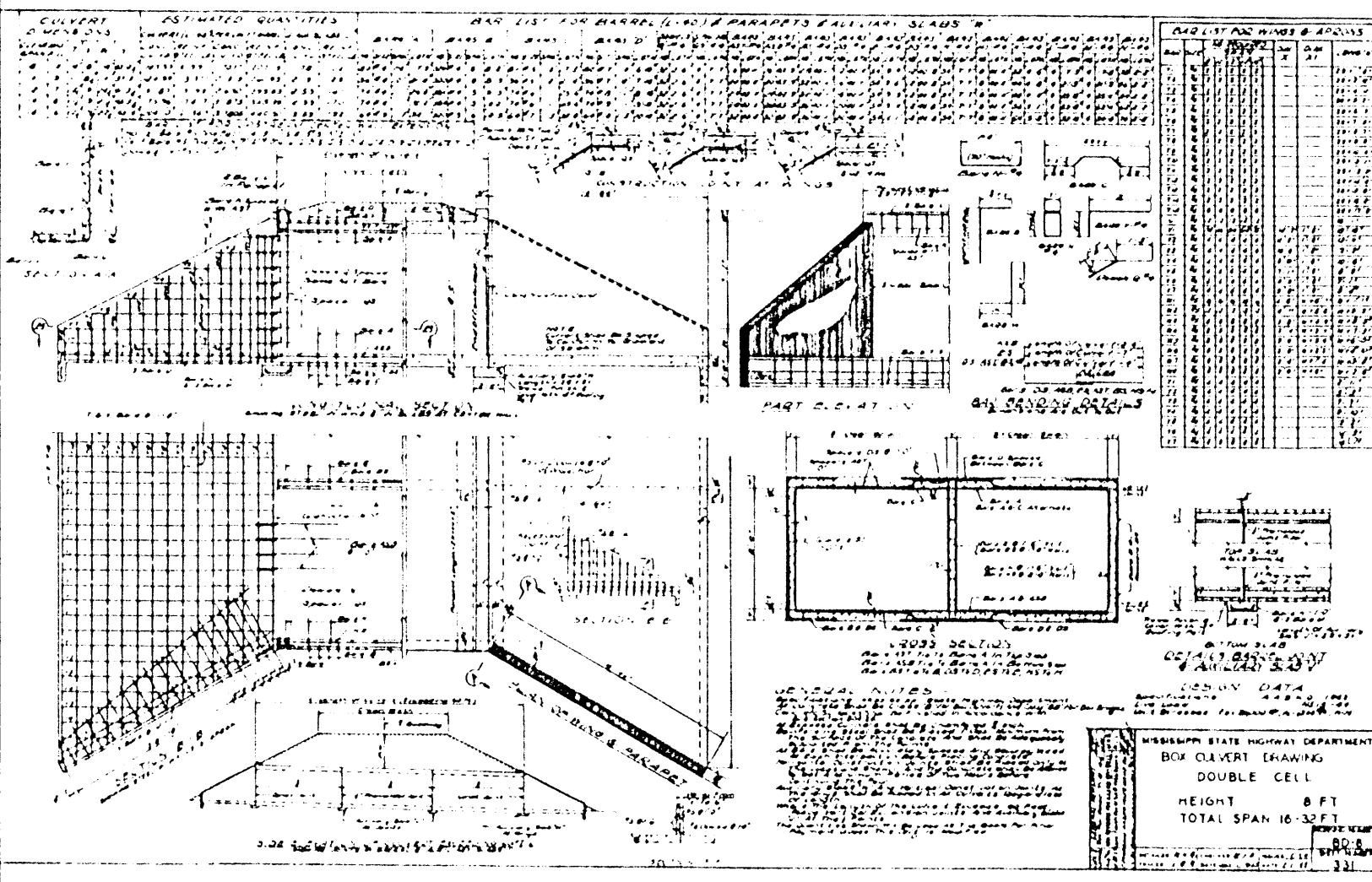
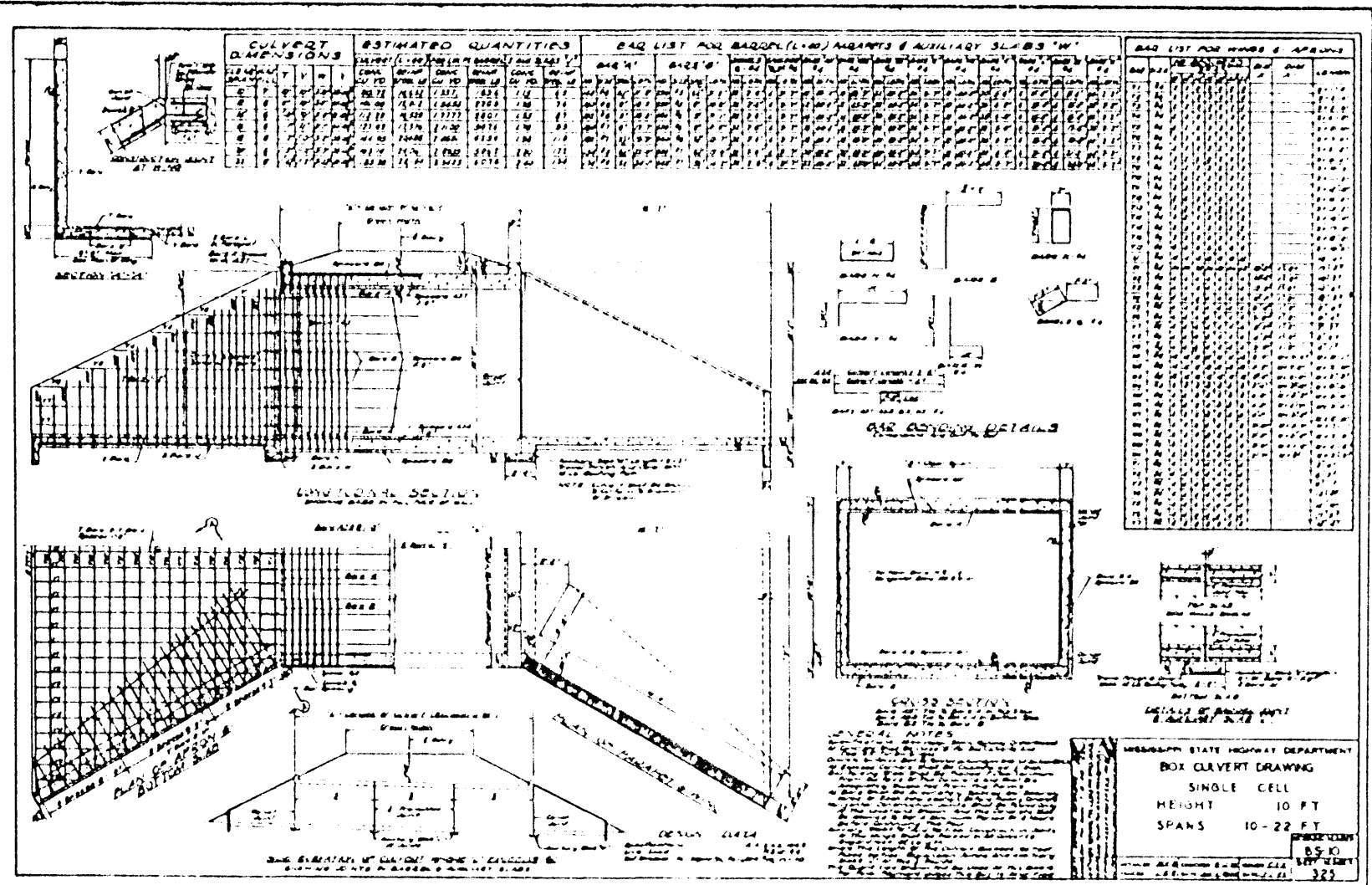
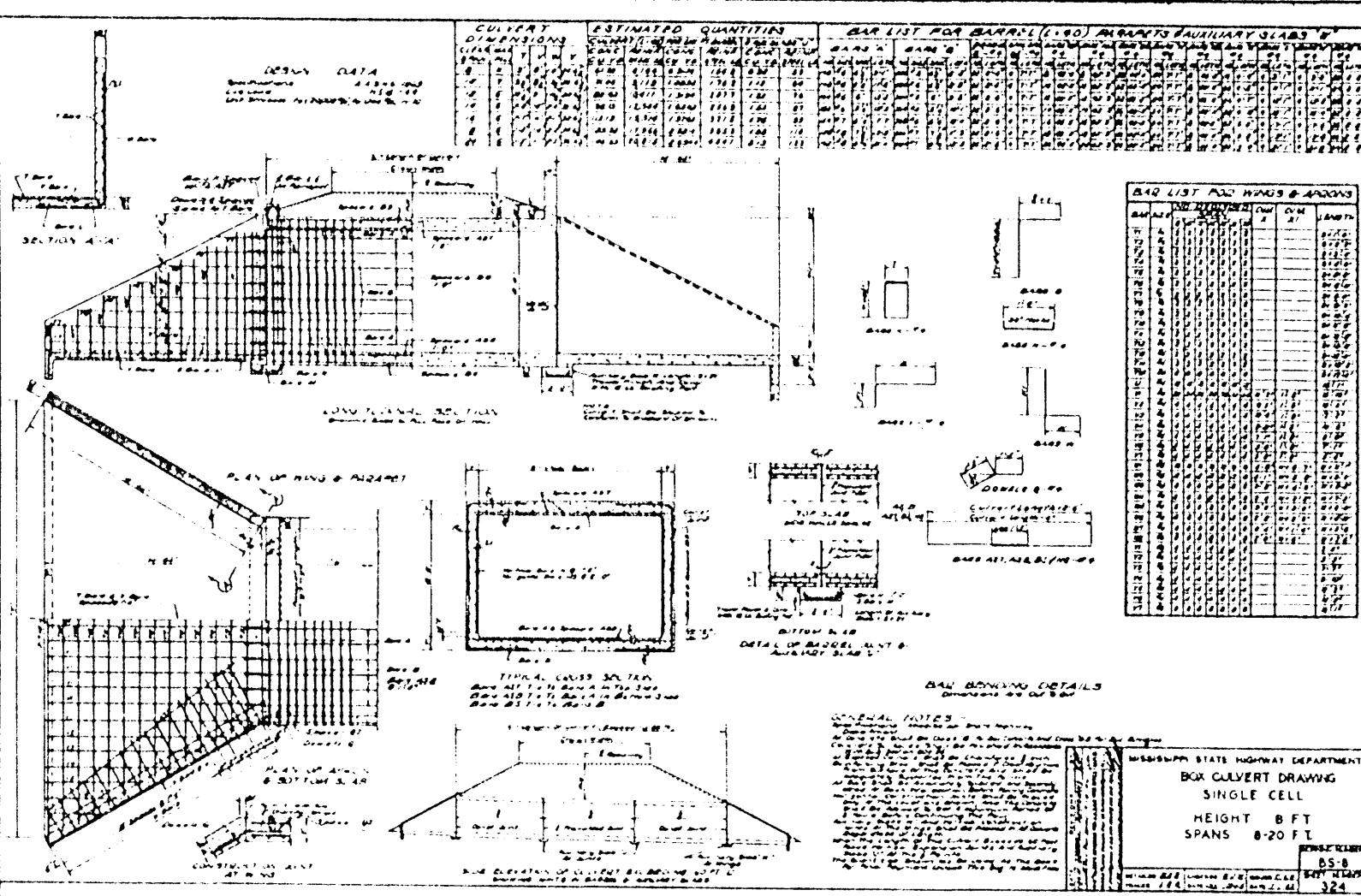
WAGGONER ENGINEERING INC. Consulting Engineers - Johnson / Brandon, Mo.		
DESIGNED BY:	DATE: November, 1988	SHEET NO.
CHECKED BY:	SCALE: As Indicated	72 of 82



BOX CULVERT STANDARDS
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
Consulting Engineers - Jackson, MS

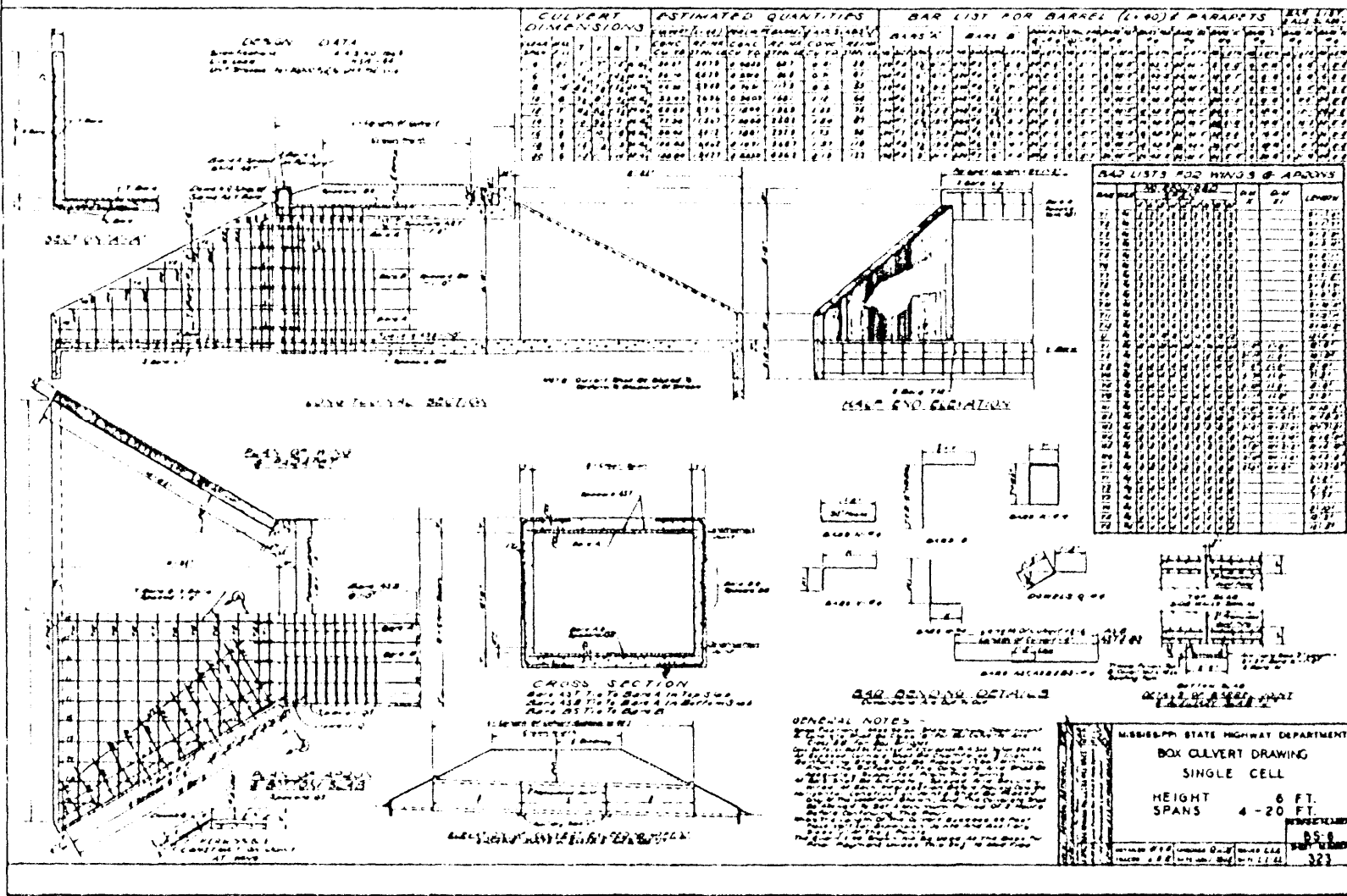
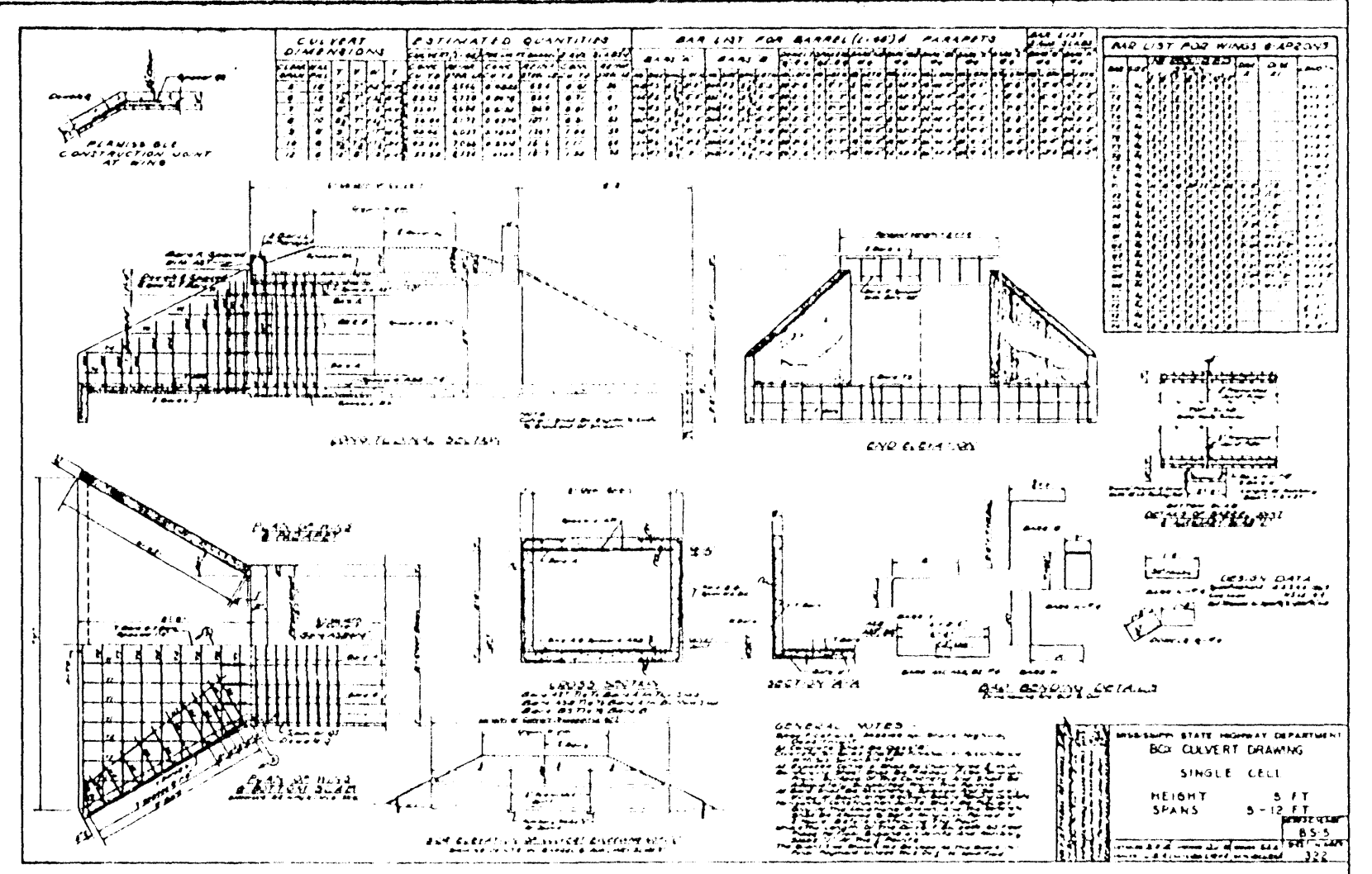
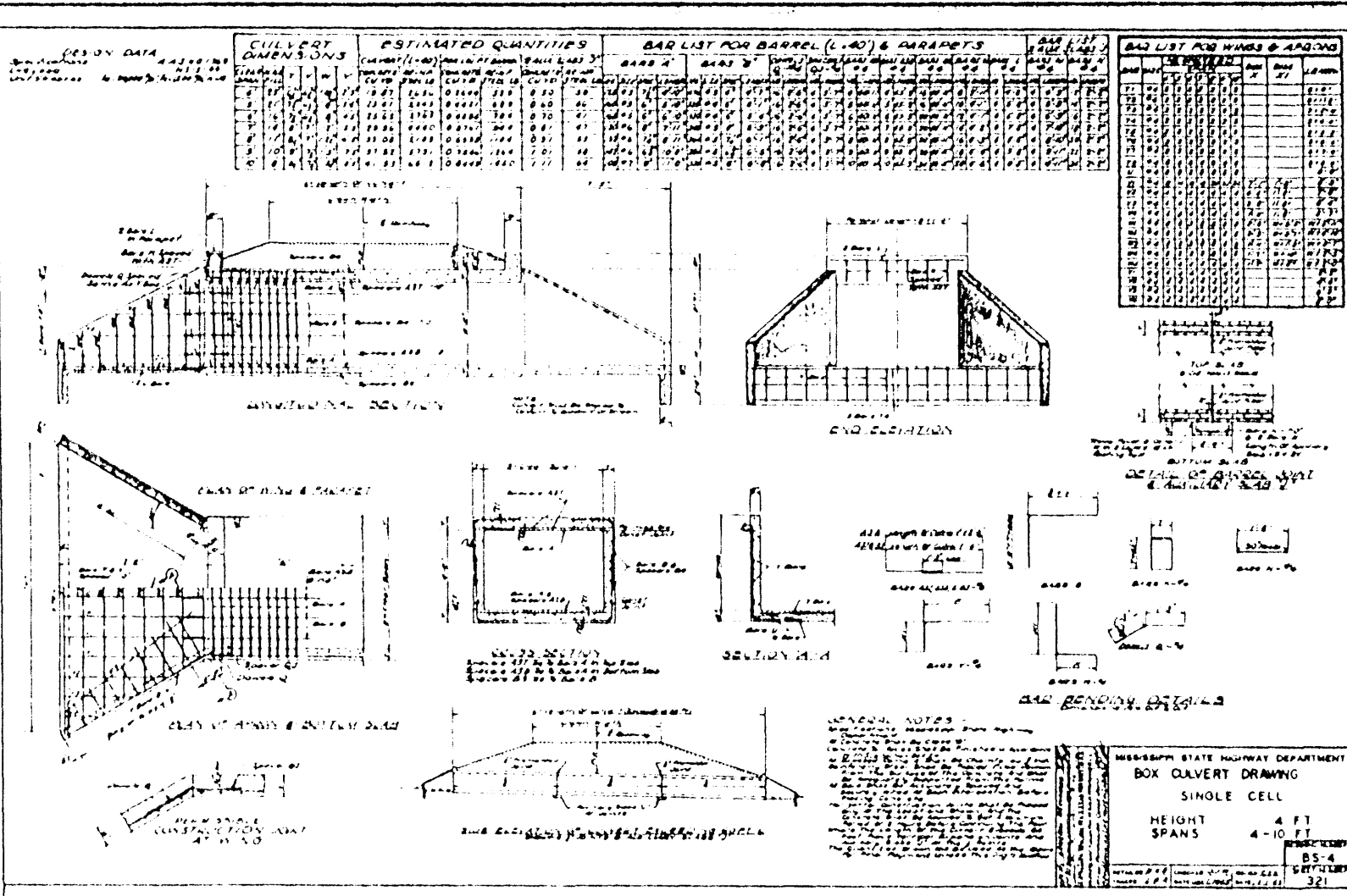
DESIGNED BY: C.R.H. DATE: 11-30-89 SHEET NO. 73 OF 82
CHECKED BY: SCALE: AS SHOWN



BOX CULVERT STANDARDS
SUMMERTREE PARKWAY

WAGGONER ENGINEERING INC
 Consulting Engineers - JACKSON, MS

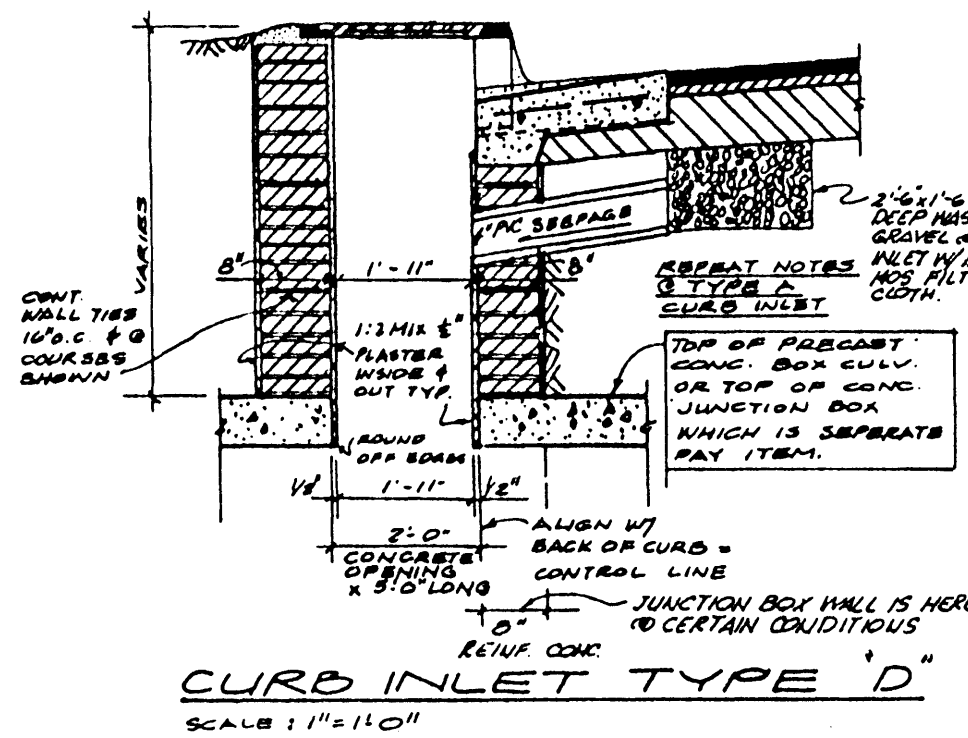
DATE 11-30-89 SHEET NO
 CHECKED BY STATE AS SHOWN 74 OF 82



BOX CULVERT STANDARDS
SUMMERTREE PARKWAY

WAGGONER ENGINEERING, INC.
Consulting Engineers, Jackson, Miss.

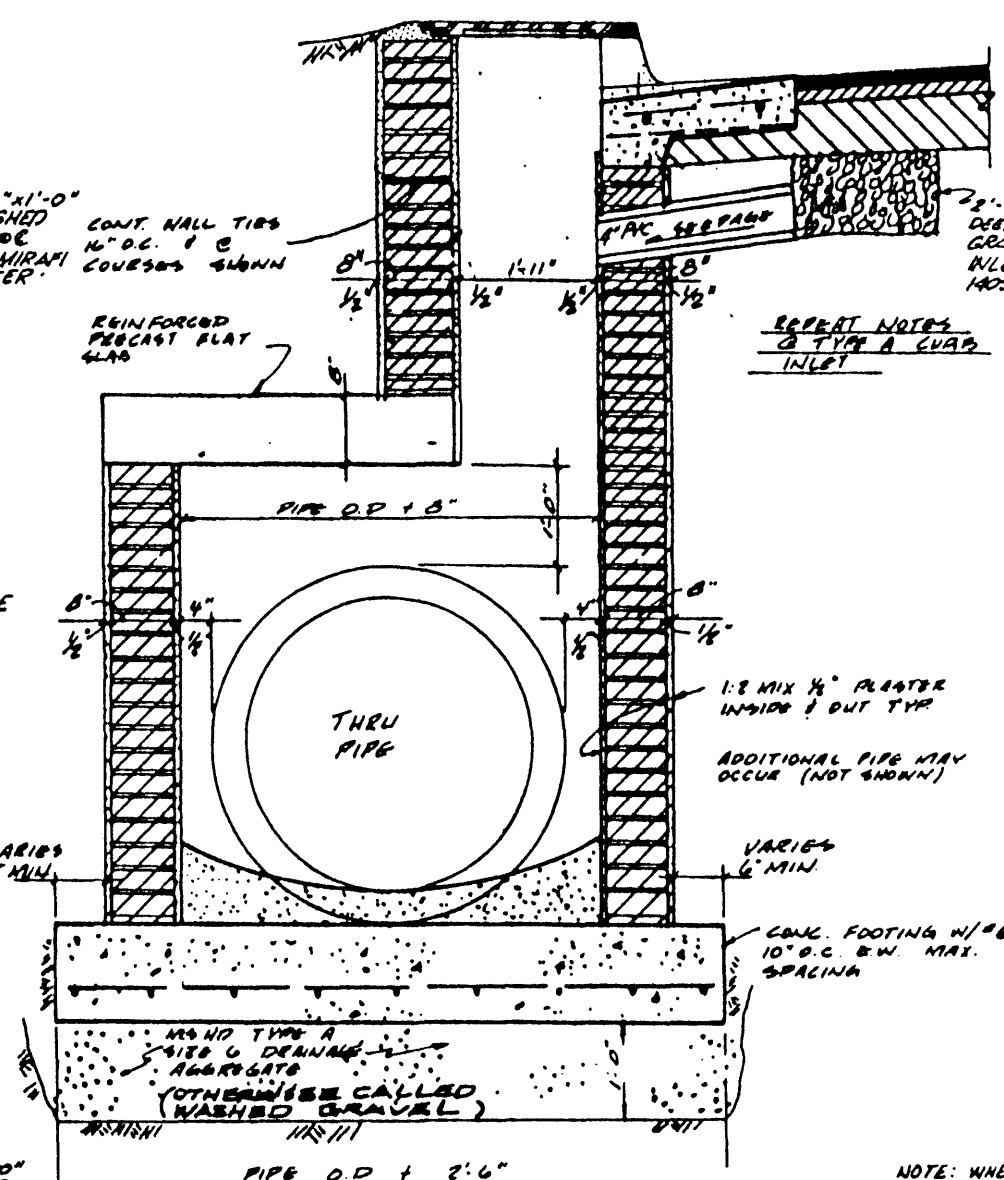
DESIGNED BY: C.R.H. DATE: 11-30-59 SHEET NO. 75 OF 82



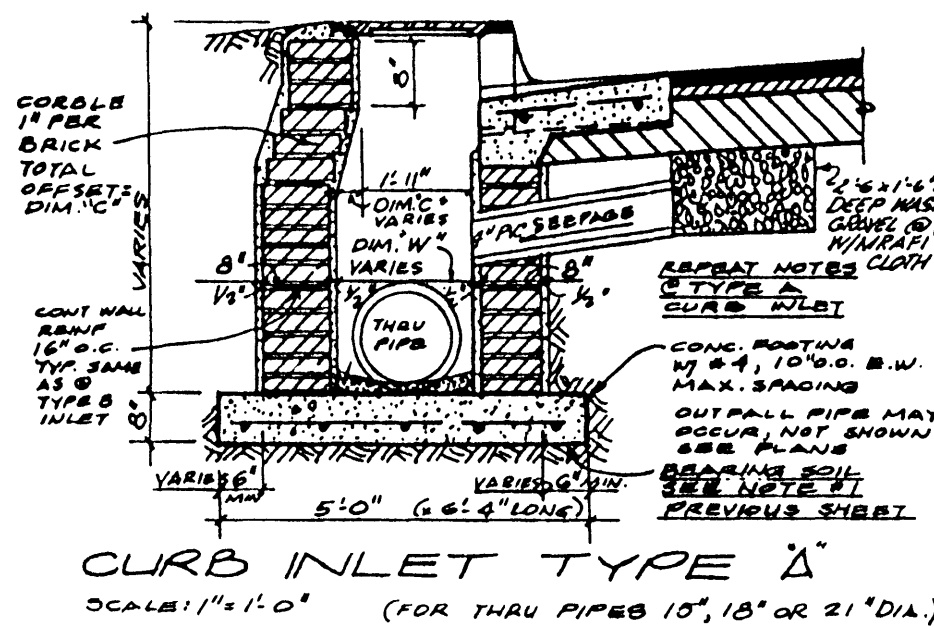
CURB INLET TYPE 'D'
SCALE: 1"=1'-0"

PIPE I.D. &	DIM. W" FINISHED SURFACE	DIM. C" CORBEL OFFSET	NOTES FOR CORBELS
15"	2'-1"	2"	2 BRICK @ 1" CORBEL EACH
18"	2'-5"	6"	4 BRICK @ 1" CORBEL EACH
21"	2'-7"	8"	8 BRICK @ 1" CORBEL EACH

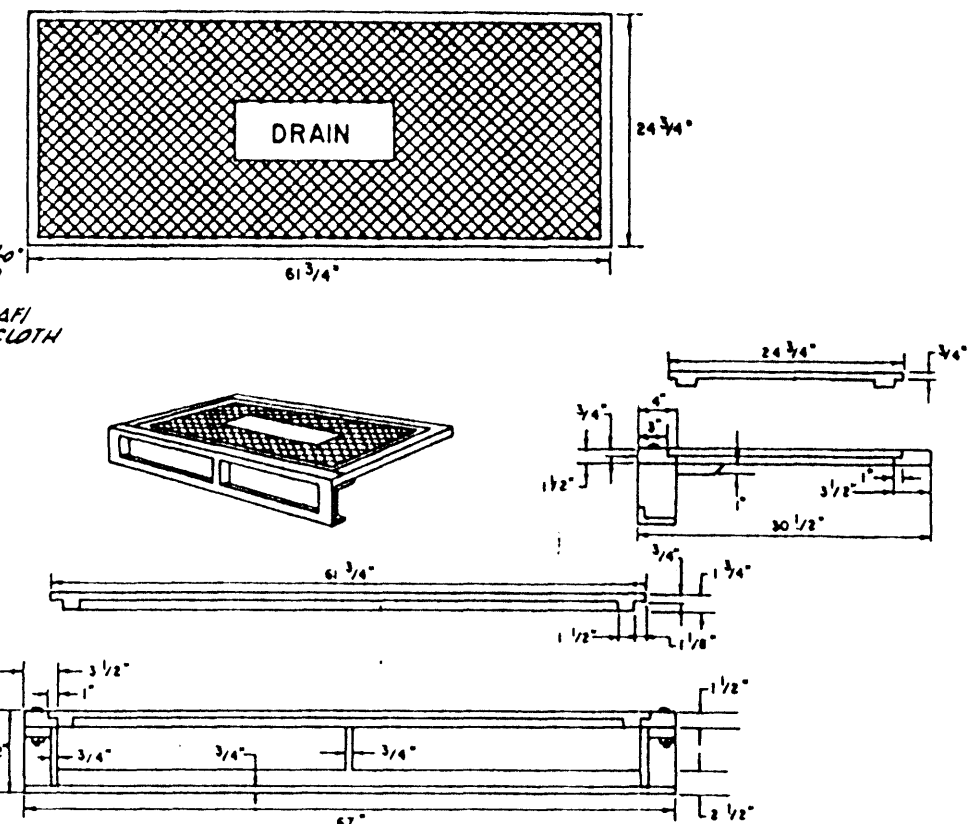
↳ LARGEST PIPE @ INLET



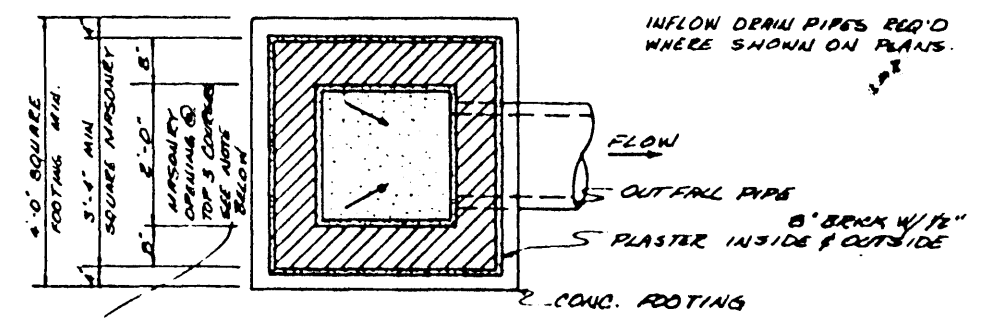
CURB INLET TYPE 'B'
SCALE: 1"=1'-0" (FOR THRU PIPES 15" TO 24" DIA.)



CURB INLET TYPE 'A'
SCALE: 1"=1'-0" (FOR THRU PIPES 10", 18" OR 21" DIA.)

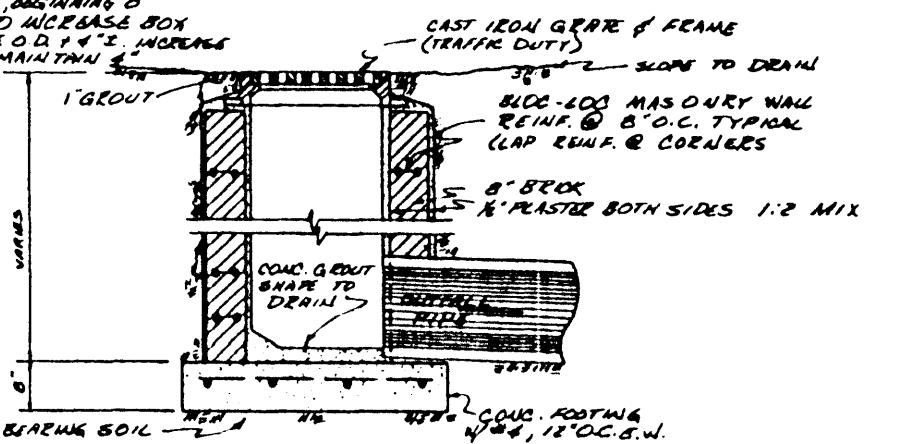


CAST IRON INLET DETAILS - ALTERNATE

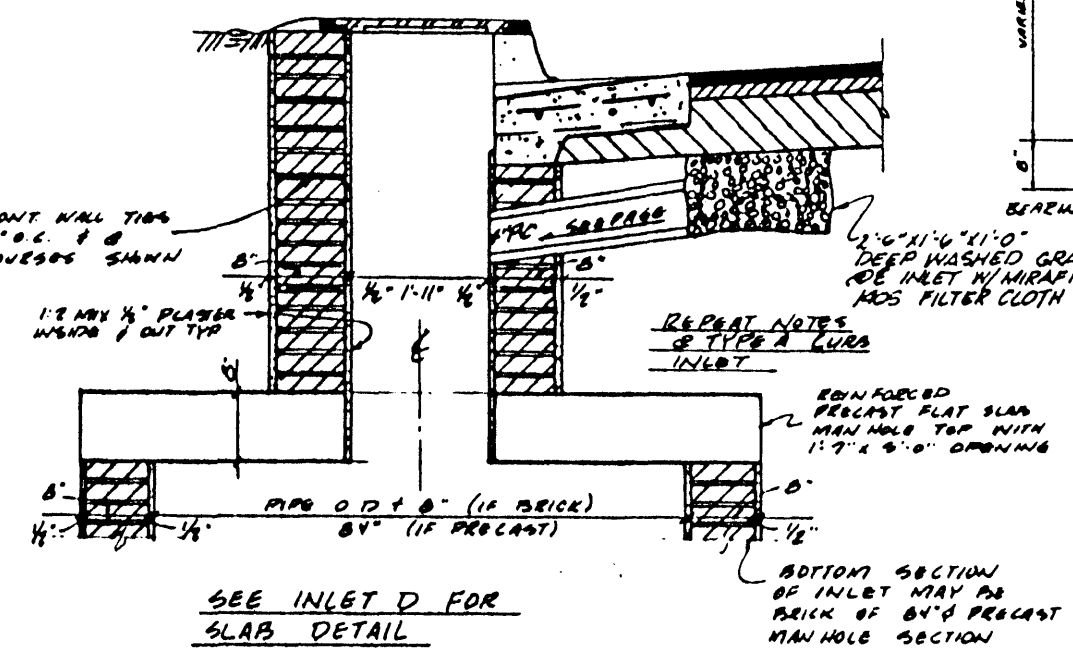


PLAN SECTION

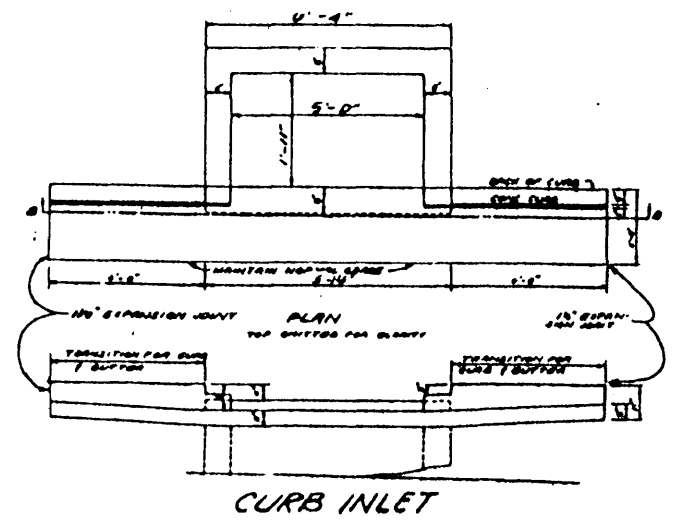
NOTE: WHERE 24" DIA. PIPE OCCURS, CORBEL BRICK BACK 1 BRICK BEGINNING @ BELOW GRATE FRAME TO INCREASE BOX SIZE TO ACCOMMODATE PIPE O.D. + 4" INCREASE FOOTING AS REQ'D. TO MAINTAIN 2"



GRATE INLET



CURB INLET TYPE 'C'
SEE INLET D FOR SLAB DETAIL

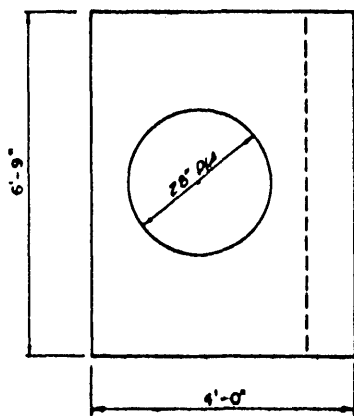


CURB INLET

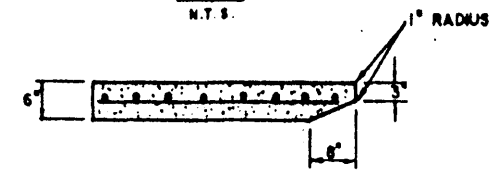
INLET DETAILS
SUMMERTREE PARKWAY

WAGONER ENGINEERING INC.
Consulting Engineers - Jackson, MS.

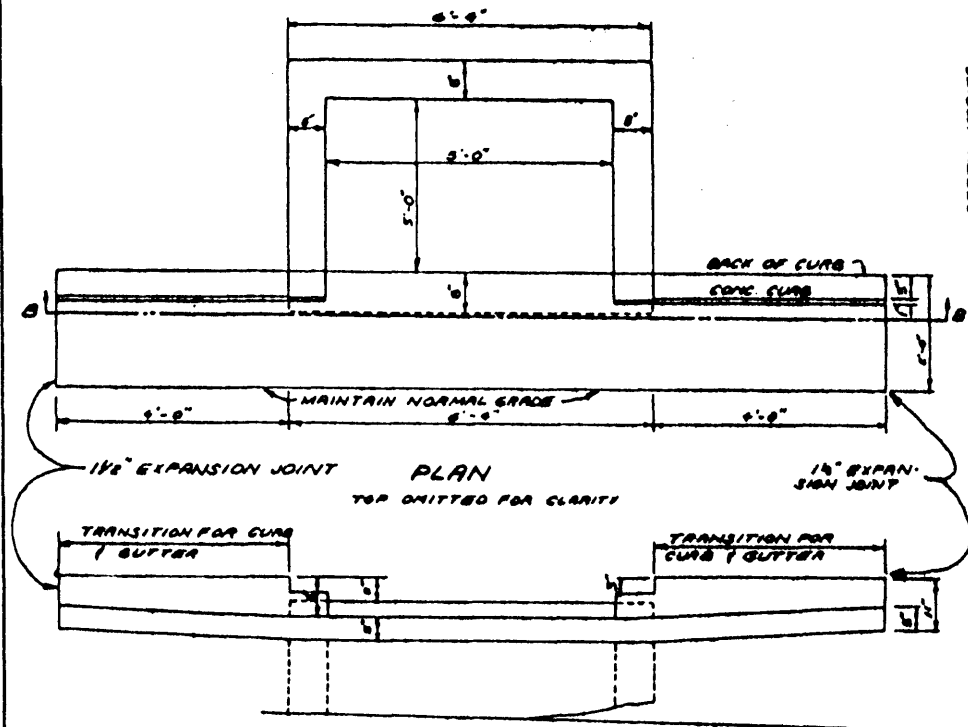
DESIGNED BY: C.R.H. DATE: 11-30-89 SHEET NO. 00



PLAN
N.T.S.

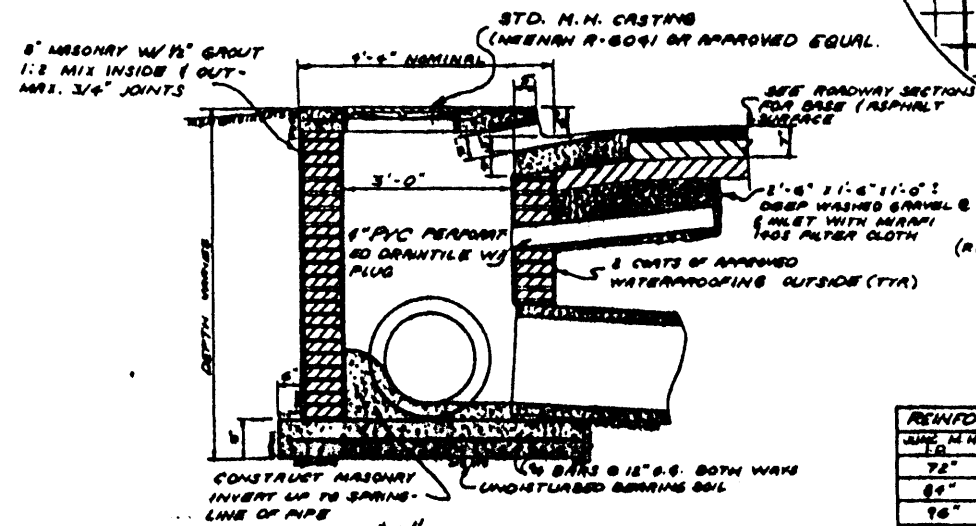


SECTION
N.T.S.
CURB INLET COVER

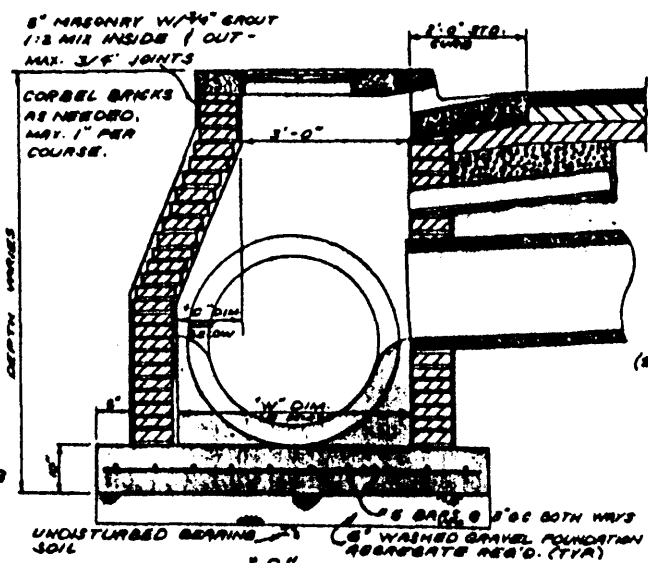


SECTION B-B
CURB INLET

REINFORCEMENT
#4 BARS 6" O.C. E.W.
CONCRETE
4000 PSI
WEIGHT
1728 LBS. (6'-9")
288 LBS / FOOT

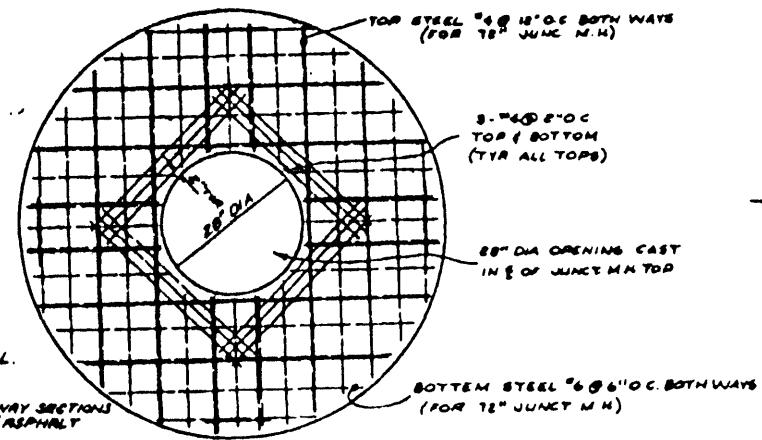


TYPE "A" INLET
(FOR PIPES 15", 18" & 21")



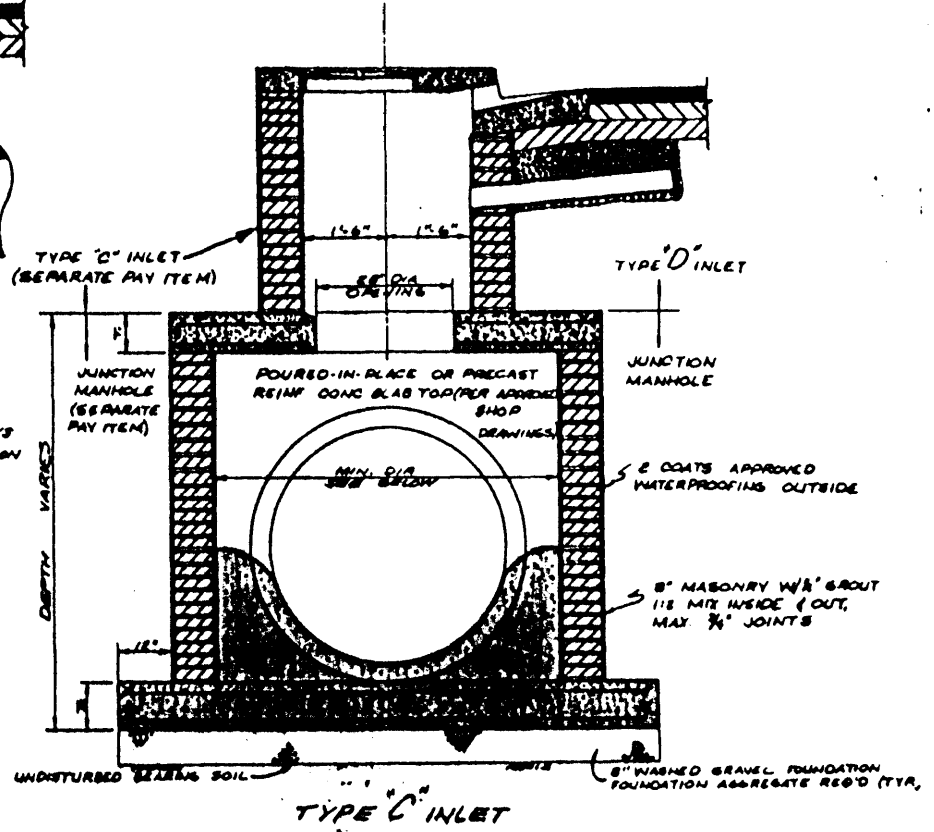
TYPE "B" INLET

PIPE I.D.	PIPE O.D.	DIM. W"	DIM. C"	MIN. GRAVEL FOUNDATION
24"	33"	37"	4"	6"
27"	36"	40"	4"	6"
30"	39"	43"	6"	6"
36"	45 1/2"	50"	10"	12"



TYPICAL
JUNCTION MANHOLE
TOP

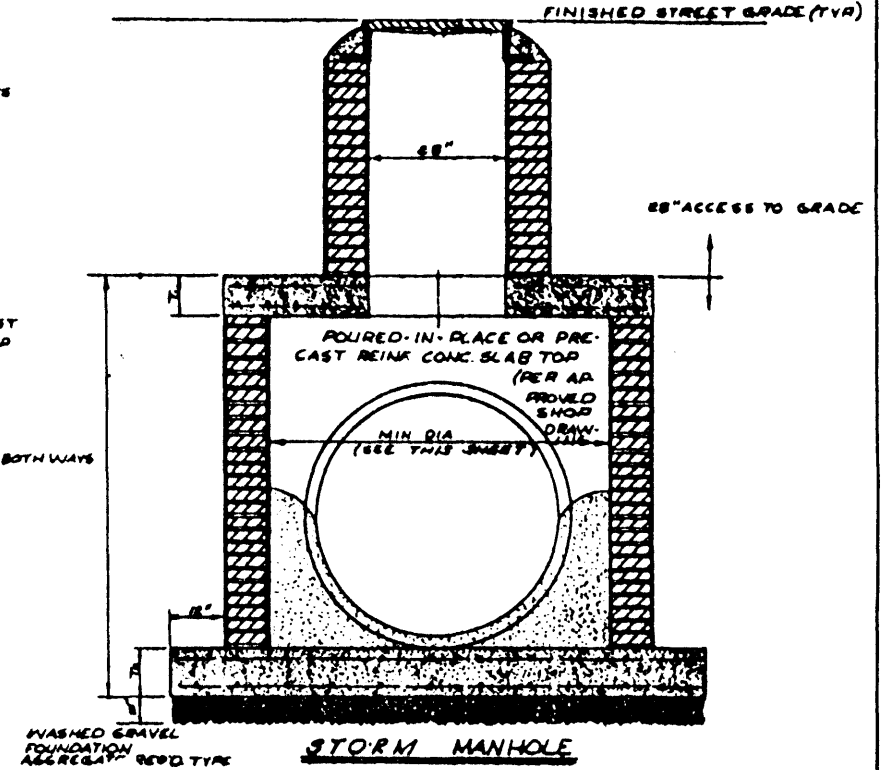
PIPE I.D.	THICKNESS	STEEL	REINFORCING
72"	8"	#8 @ 12" O.C.	#8 @ 6" O.C.
84"	9"	#8 @ 12" O.C.	#8 @ 6" O.C.
96"	10"	#8 @ 12" O.C.	#8 @ 6" O.C.
120"	12"	#8 @ 12" O.C.	#8 @ 6" O.C.



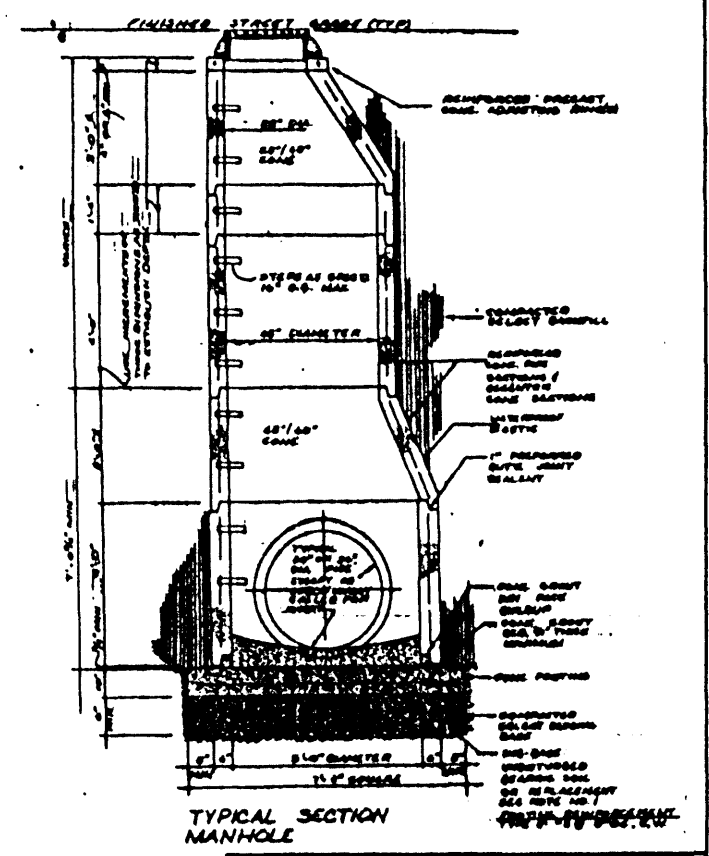
TYPE "C" INLET

PIPE I.D.	PIPE O.D.	MIN. T ₁	MIN. T ₂	REINFORCING
24"	33"	8"	10"	#8 @ 12" O.C.
27"	36"	8"	10"	#8 @ 12" O.C.
30"	39"	8"	12"	#8 @ 12" O.C.
36"	45 1/2"	9"	12"	#8 @ 12" O.C.
48"	57"	10"	12"	#8 @ 12" O.C.
60"	69"	10"	12"	#8 @ 12" O.C.
72"	81"	10"	12"	#8 @ 12" O.C.
84"	93"	12"	12"	#8 @ 12" O.C.

NOTE: ALL REINFR. BOTH WAYS - EACH FACE



STORM MANHOLE

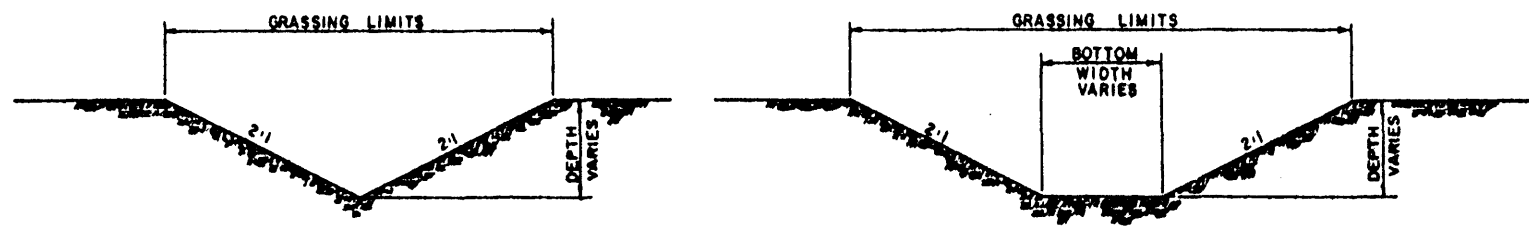


TYPICAL SECTION
MANHOLE

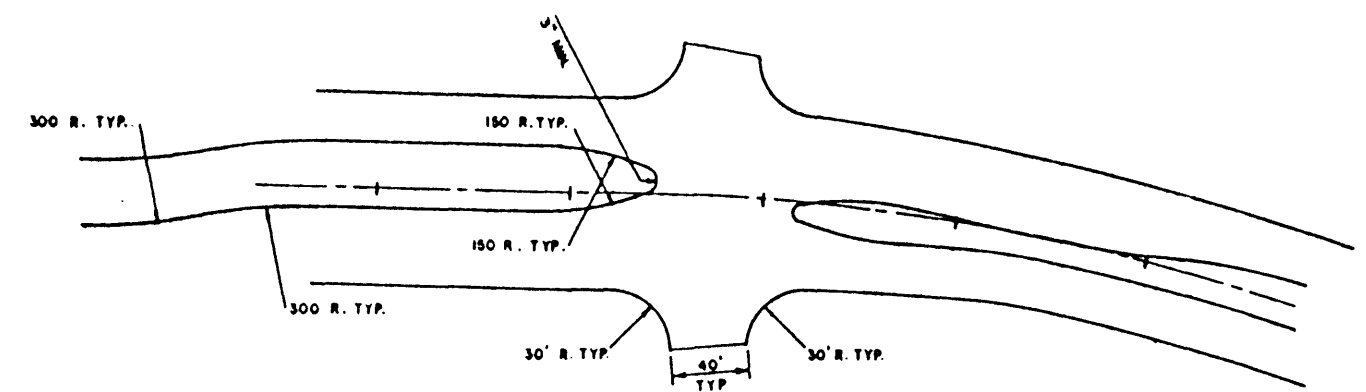
INLET DETAILS
SUMMERTREE PARKWAY

WAGGONER ENGINEERING INC.
CONCRETE DIVISION - JACKSON, MISSISSIPPI

DRAWN BY: C.A.H.	DATE: 11-30-88	SHEET NO.
CHECKED BY: WILLY	BY: N.T.S.	77 OF 82

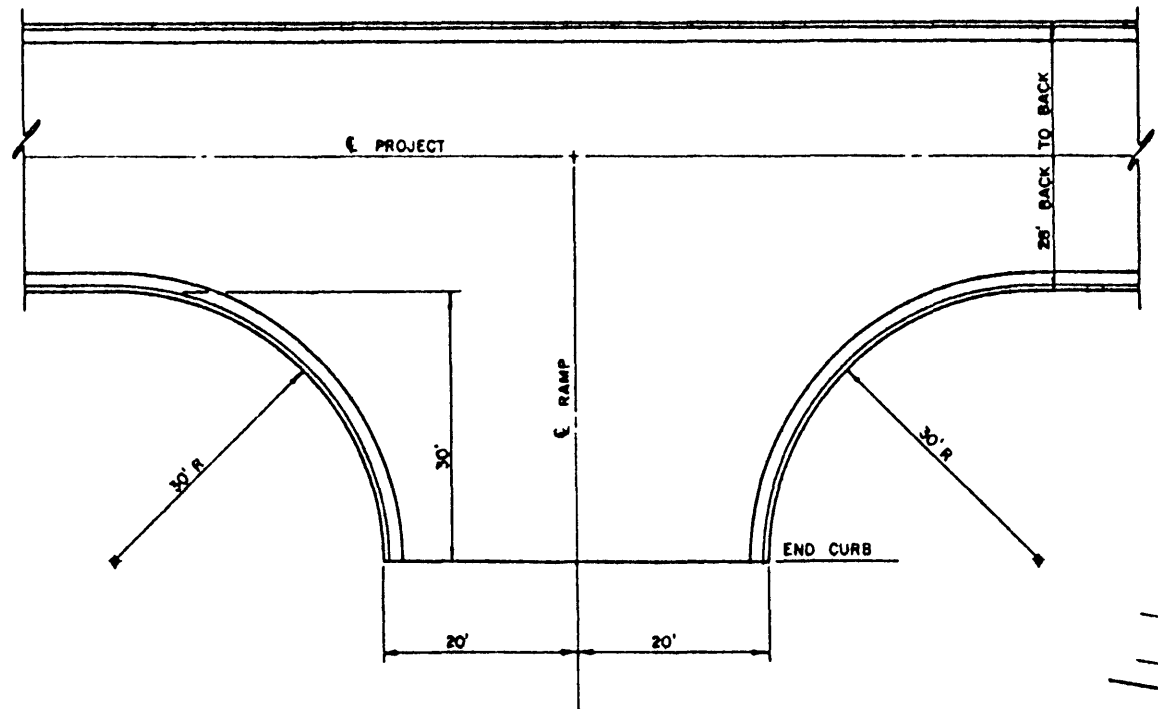


TYPICAL DITCH SECTIONS



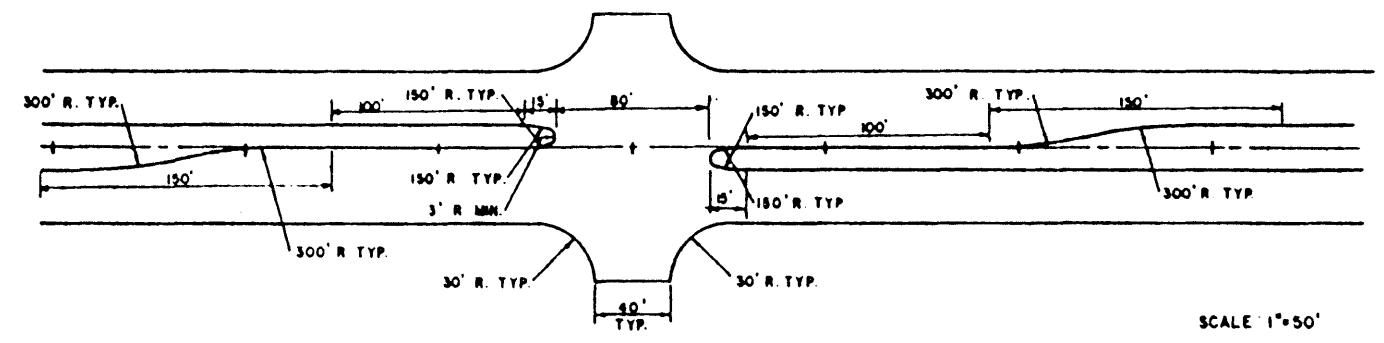
TYPICAL MEDIAN DETAIL

SCALE: 1"=50'



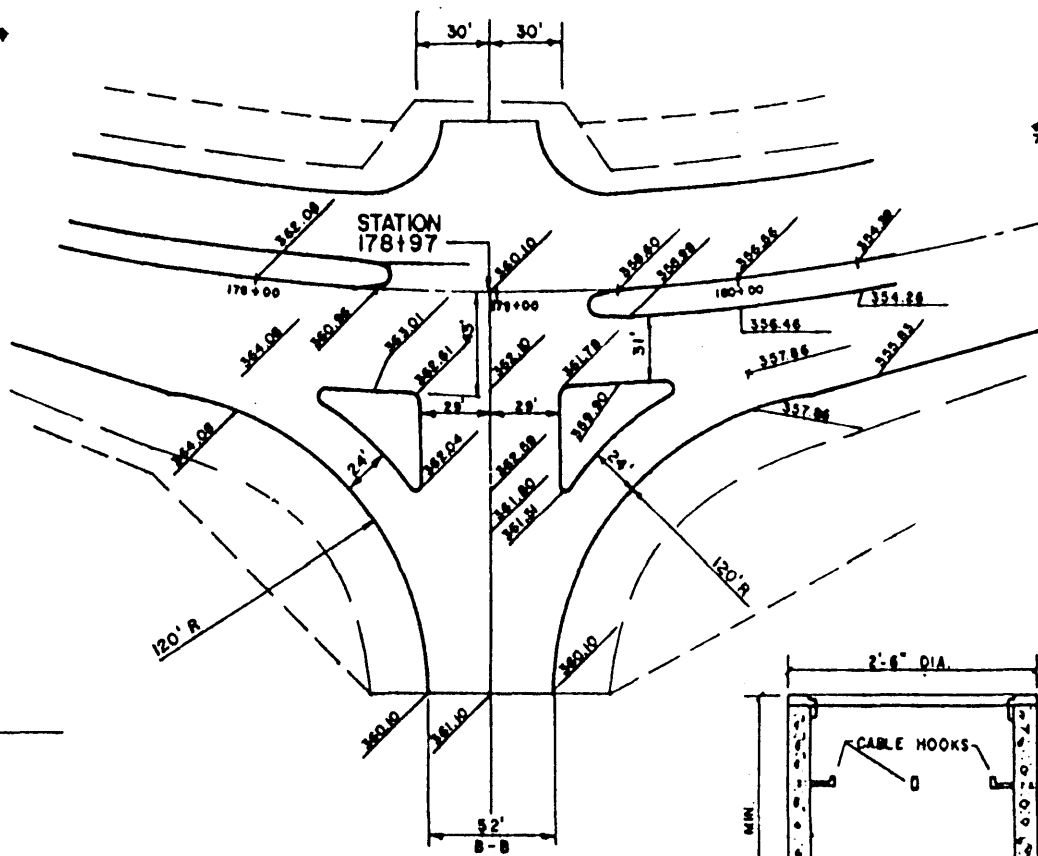
TYPICAL RAMP SECTION CUT

TYPICAL RAMP SECTION FILL



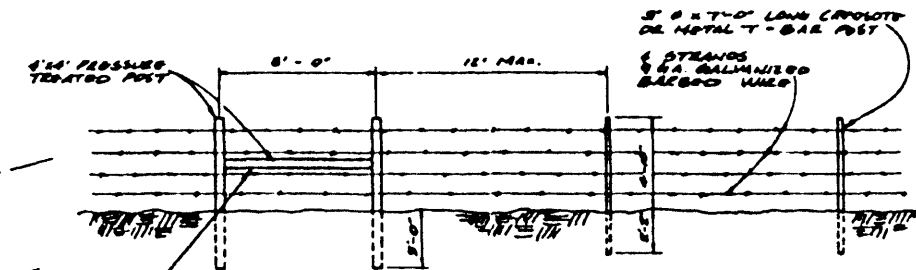
TYPICAL TURNOUT DETAIL

SCALE: 1"=50'



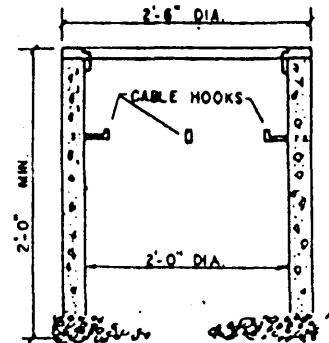
SCHOOL ST. EXTENSION INTERSECTION DETAIL

SCALE: 1"=40'
NOTE: ELEV. ARE TOP OF PAVEMENT



TYPICAL DETAIL BARBED WIRE FENCE

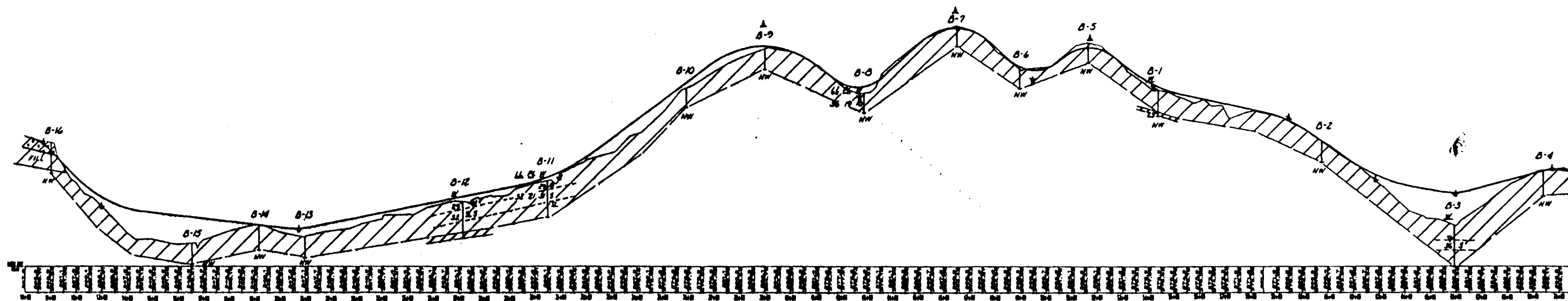
TYPICAL BRACE BARS
BRACE BARS TO BE LOCATED AT ALL CORNERS AND ON 300' INTERVALS ON FENCE LINE OR AS DIRECTED BY ENGINEER.



PRE-CAST CONCRETE SERVICE BOX

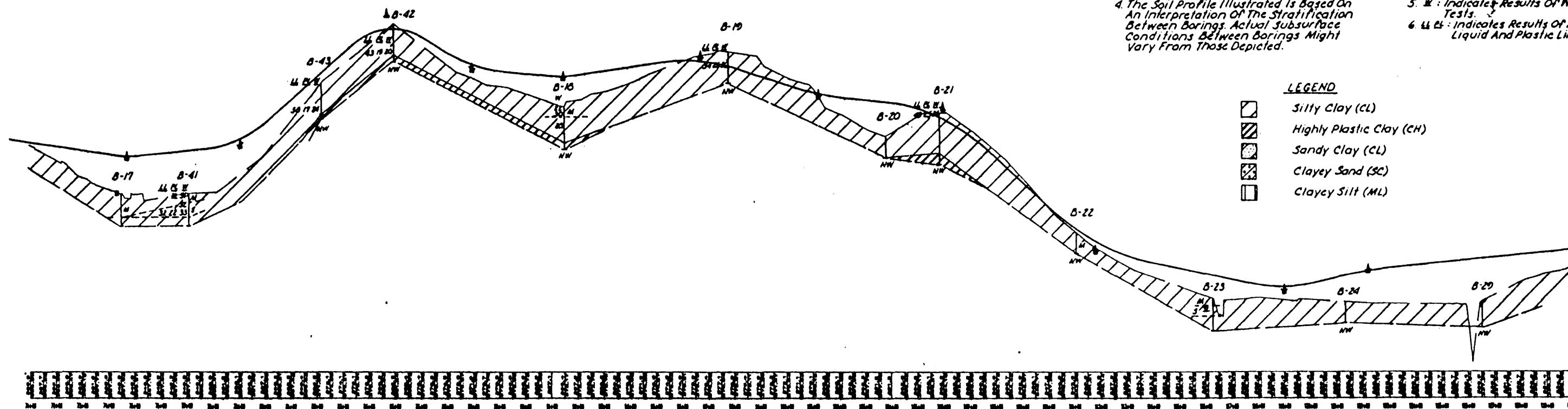
CAST 1" MIN. EDGE AND COVER, 80 LB. MIN. REINFORCED LETTERS ON CAST 1" MIN. COVER TO READ "SIGNAL"
UNLESS OTHERWISE NOTED ON THE PLANS, THE SERVICE BOX MAY ALSO BE FORMED IN PLACE WITH 6" PORTLAND CEMENT MORTAR.

MISCELLANEOUS DETAILS			
SUMMERTREE PARKWAY			
WAGGONER ENGINEERING INC. Consulting Engineers - Jackson, MS.			
DRAWN BY: C.R.H.	DATE: 11-30-89	SHEET NO.	
CHECKED BY:	SCALE: AS SHOWN	78 of 82	



- NOTES:**
1. Borings Made By Auger During July, August And November, 1962.
 2. Consistencies Of Clayey Soils Are Stiff Or Very Stiff Unless Indicated Otherwise.
 3. All Soils Classified In Accordance With Unified Soil Classification System (ASTM D 2487-65).
 4. The Soil Profile Illustrated Is Based On An Interpretation Of The Stratification Between Borings. Actual Subsurface Conditions Between Borings Might Vary From Those Depicted.

- SYMBOLS:**
1. NW: Indicates No Water Encountered During Drilling.
 2. W: Indicates Depth Water First Encountered During Drilling.
 3. M: Indicates Medium Stiff Consistency.
 4. S: Indicates Soft Consistency.
 5. W: Indicates Results Of Water Content Tests.
 6. LL & PL: Indicates Results Of Atterberg Liquid And Plastic Limit Tests.



LEGEND

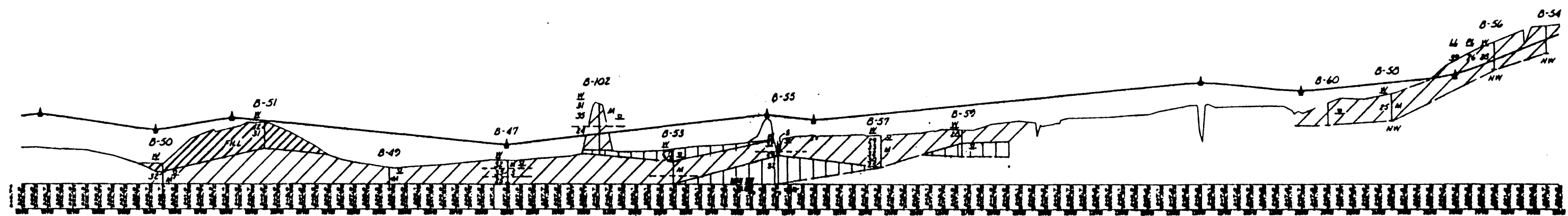
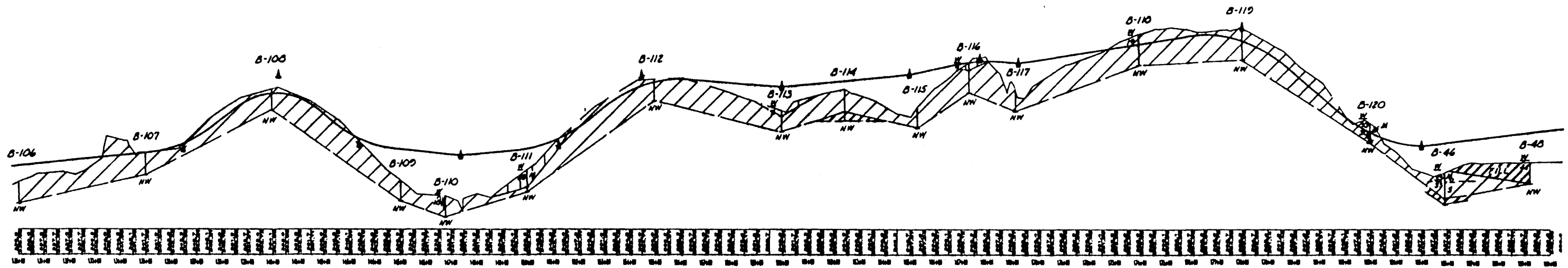
- Silty Clay (CL)
- Highly Plastic Clay (CH)
- Sandy Clay (CL)
- Clayey Sand (SC)
- Clayey Silt (ML)

SCALE: $\frac{1"}{200'}$ (HORIZ.)
 $\frac{1"}{10'}$ (VERT.)

**SUMMERTREE PARKWAY
SOIL PROFILE**

SOIL PROFILE PREPARED BY:
BURNS ENGINEERING, INC.

WAGGONER ENGINEERING, INC. Geotechnical Engineers - Jackson, Mississippi		
DESIGNED BY	DATE: NOV. 20, 1962	SHEET NUMBER
DRAWN BY	ISSUED AS SHOWN	79 of 82



Note: Borings Were Not Made Between Station 227100 And Station 241100 Because Of Standing Water.

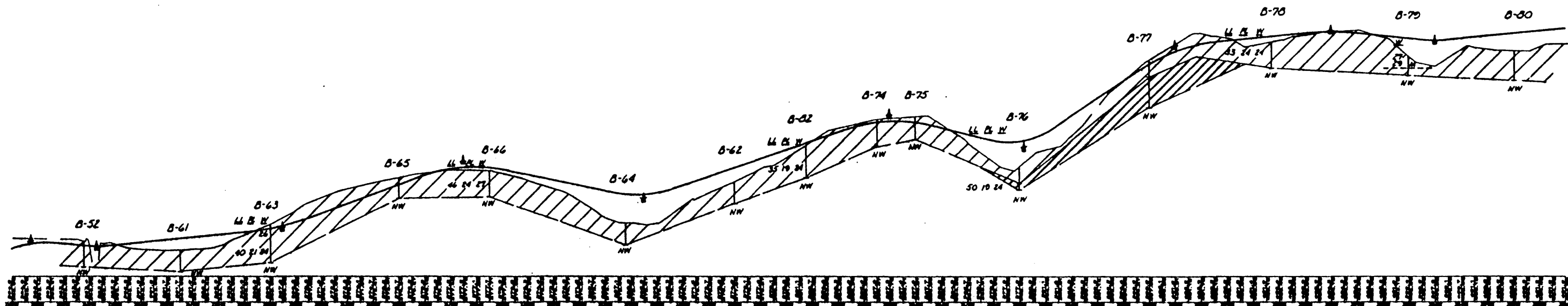
See Sheet 74 of 82 for Notes, Symbols And Legend.

SCALE: $\frac{1" = 200'(HORIZ.)}{1" = 10'(VERT.)}$

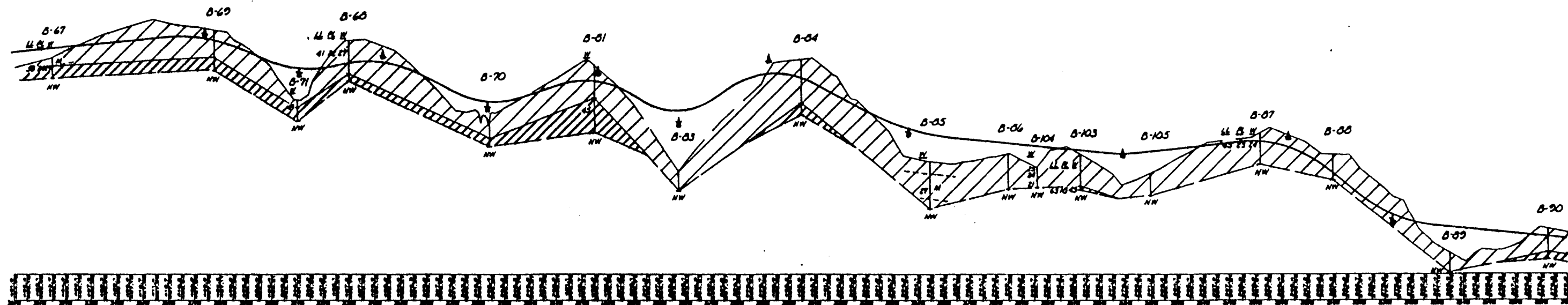
SUMMERTREE PARKWAY
SOIL PROFILE

SOIL PROFILE PREPARED BY:
BURNS ENGINEERING, INC.

WAGNER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi		
DESIGNED BY	DRAWN BY	CHECKED BY
DATE: NOV. 20, 1969		SHEET NUMBER
SCALE AS SHOWN		80 OF 82



NOTE: The Roadway Alignment Between
Approximate Stations 253100 And
328100 Was Revised After The Soil
Borings Were Completed And The
Actual Boring Locations Are Not
On The Centerline As Depicted.



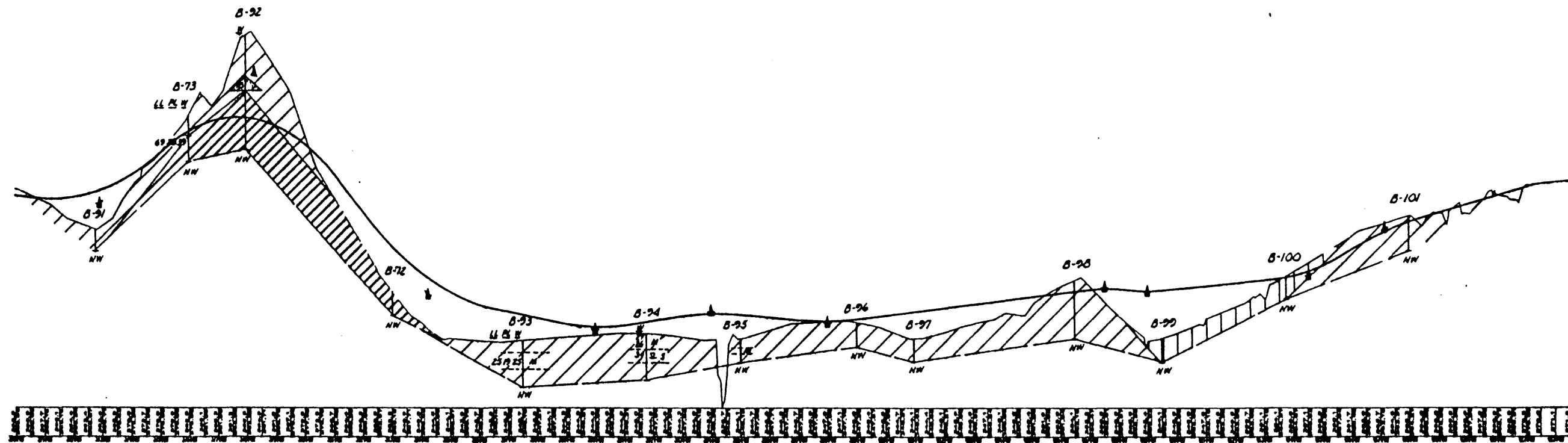
See Sheet 7907B For Notes, Symbols And Legend.

SCALE: $\frac{1"}{200'}$ (HORIZ.)
 $\frac{1"}{10'}$ (VERT.)

SOIL PROFILE PREPARED BY:
BURNS ENGINEERING, INC.

SUMMERTREE PARKWAY
SOIL PROFILE

WAGGONER ENGINEERING, INC. Geotechnical Engineers - Jackson, Mississippi		
DATE: 11/1/88	DATE: NOV. 24, 1988	SHEET NUMBER
SCALE: AS SHOWN		81 OF 82



SCALE: $\frac{1'' = 200'(\text{HORIZ.})}{1'' = 10'(\text{VERT.})$

See Sheet 7 of 2 For Notes, Symbols And Legend.

SUMMERTREE PARKWAY
SOIL PROFILE

SOIL PROFILE PREPARED BY:
BURNS ENGINEERING, INC.

WAGGONER ENGINEERING, INC.

Professional Engineer - Indiana, No. 12345

DATE BY S. S.	DATE NOV. 25, 1959	SHEET NUMBER
DESIGNED BY	SCALE AS SHOWN	82 OF 82