STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			

INDEX OF SHEETS

SHEET NO. 1	TITLE PAGE
2	TYPICAL SECTIONS OF IMPROVEMENT
3-5	SUMMARY SHEETS
6	TEMPORARY EROSION CONTROL
7-15	PLAN & PROFILE SHEETS
16-156	CROSS SECTIONS

STATE OF NEW HAMPSHIRE
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

PLANS OF PROPOSED

FEDERAL AID SECONDARY PROJECT

RS-TQS-270(9)

N.H. PROJECT NO. S-2562

GENERAL REID HIGHWAY (NH. RTE. 119)

SCALES
PLAN 1" = 50'
PROFILE VERT. 1" = 10' HOR. 1" = 50'
CROSS SECTION VERT. 1" = 10' HOR. 1" = 10'

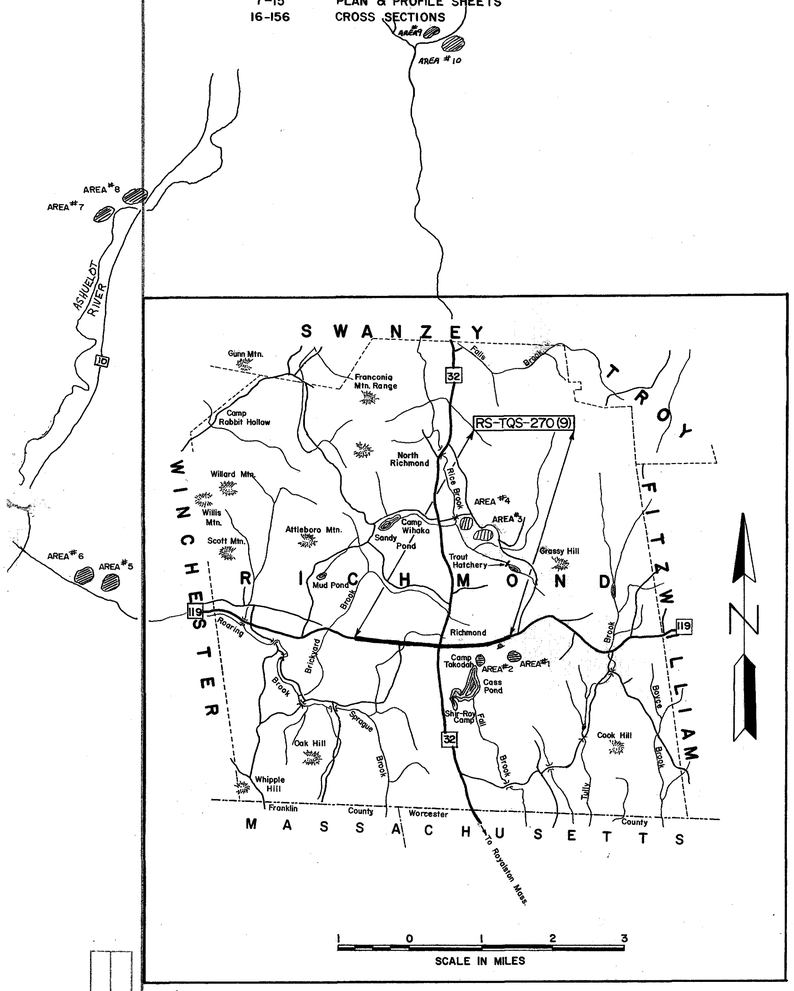
THIS PROJECT TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS DATED 1974 AND SUPPLEMENTAL SPECIFICATIONS, CURRENT STANDARD SHEETS AND SPECIAL PROVISIONS ATTACHED TO PROPOSAL.

INDEX OF STANDARDS

STANDARD NO.	STATUS	DATE
2	REVISED	JAN. 26, 1979
2 A	NEW SHEET	JUNE 7, 1974
3	REVISED	NOV. 15, 1979
3 A	"	JUNE 2, 1978
3 B	"	JAN. 26, 1979
4	"	FEB. 26, 1975
5A	"	FEB 26, 1975
9	"	AUG. 2, 1977
9 A	NEW SHEET	JAN. 4, 1973
11	REVISED	MAY 21, 1975
12	"	FEB. 5, 1980
CS-1	"	MAY 10, 1980
CS-2	NEW SHEET	MAY 2, 1979
CS-3	REVISED	NOV. 15, 1979
CS-4	NEW SHEET	MAY 2, 1979
CS-5	REVISED	NOV 15, 1979
CS-6	NEW SHEET	MAY 2, 1979
CS-7	REVISED	MAY 10, 1980
CS-8	"	" "
CS-9	"	" "
CS-10	"	" "
CS-11	"	NOV. 15, 1979
CS-12	NEW SHEET	MAY 2, 1979
CS-13	" "	" "

DESIGN DATA

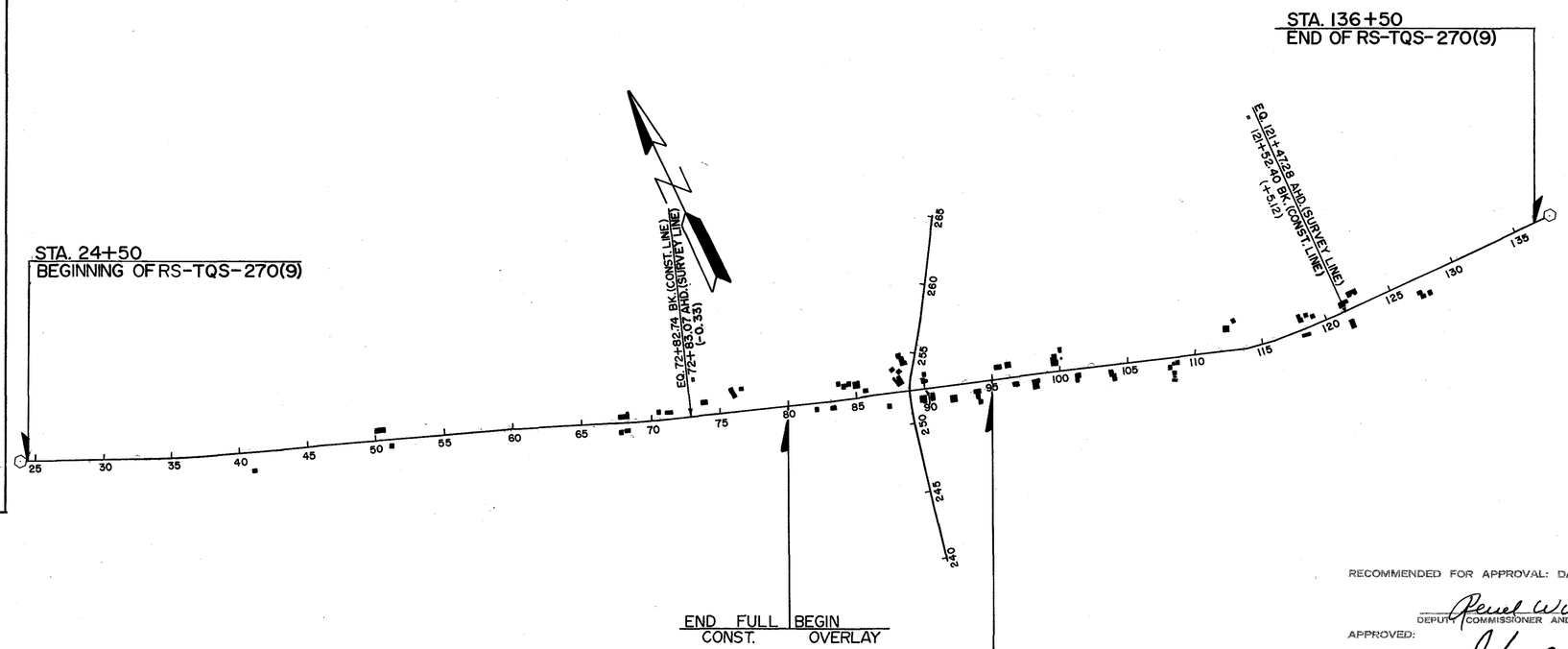
AVERAGE DAILY TRAFFIC	1976	700	
AVERAGE DAILY TRAFFIC	1996	900	
TRAFFIC CLASSIFICATION		M	
DESIGN SPEED		40	M. P. H.
MAXIMUM CURVATURE		6°-0'	DEGREES
MAXIMUM GRADIENT		7.28	%
NON-PASSING SIGHT DISTANCE			
K FACTOR -- CREST 65	SAG	60	
LENGTH OF PROJECT		2.122	MILES



MATERIALS
DEPOSITS LOCATIONS

CONVENTIONAL SIGNS

STATE LINE
TOWN LINE
FENCE
STONE WALL
UNFENCED PROPERTY
TRAVELED WAY
RAILROAD
RETAINING WALL
SEWER MANHOLE
HYDRANT
LEDGE
BRUSH LINE
SWAMP
PROPERTY PARCEL NO.
R O W LINE
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TELEGRAPH POLE
JOINT POWER & TEL. POLE
GROUND ELEVATION (LEFT)
GRADE ELEVATION (RIGHT)
SLOPE LINE
CATCH BASIN
DROP INLET
BOUND
CLEARING & GRUBBING AREA



LAYOUT
SCALE 1" = 500 FEET

TOWN OF RICHMOND
COUNTY OF CHESHIRE

AS BUILT PLANS

RECOMMENDED FOR APPROVAL: DATE 6-2-80
DEPUTY COMMISSIONER AND CHIEF ENGINEER
APPROVED:
COMMISSIONER
FOR MUNICIPAL HIGHWAY ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:
DIVISION ADMINISTRATOR DATE

PLANS PREPARED UNDER THE SECONDARY & OFF - SYSTEM ROAD PLAN

DRAWN BY | CHECKED BY | DATE | DATE

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270 (9)	1	156

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.			

TYPICAL SECTION NO. 11-4-4

SCALE: 1/4" = 1'-0"

GENERAL NOTES

ALL DRIVES SHALL BE MATCHED IN KIND, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS ORDERED. ALL GRAVEL DRIVES TO RESIDENCES, AND OTHER GRAVEL DRIVES WHEN ORDERED, SHALL BE CONSTRUCTED WITH A PAVED APRON ADJACENT TO THE SHOULDER.

MOVING OF ALL UTILITY POLES AND THE ADJUSTMENT OF OTHER UTILITIES WILL BE DONE BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE, NOT A PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH THE OWNER IN EVERY WAY TO EXPEDIATE SUCH ADJUSTMENTS.

ALL EARTH SLOPES, EITHER IN EXCAVATION OR FILL AREAS, SHALL BE MULCHED.

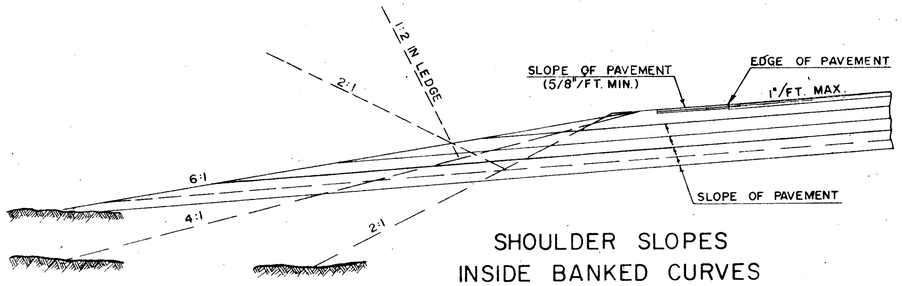
HUMUS (ITEM 647.1) SHALL BE APPLIED TO ALL EARTH SLOPES NOT LOAMED TO A NOMINAL DEPTH OF 2.5"

MUCK SHALL BE REMOVED BY EXCAVATION UNDER ITEM 203.4 OR BY DISPLACEMENT, AS ORDERED BY THE ENGINEER.

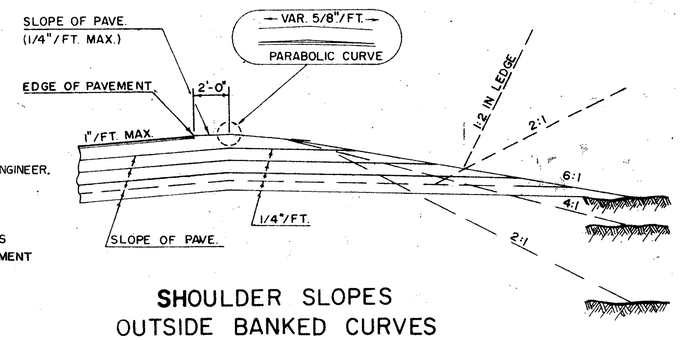
DRIVES AT LOCATIONS WHERE GRADES HAVE BEEN STEEPENED TO THE EXTENT THAT A MORE STABLE SURFACE IS WARRANTED, SHALL BE PAVED WITH 2" OF HOT BITUMNOUS PAVEMENT OVER 12" GRAVEL, UNLESS OTHERWISE NOTED.

SUBGRADE SHALL BE SCARIFIED TO ASSURE THAT ALL COBBLES OVER 6" AND BOULDERS BE REMOVED WITHIN 36" OF FINISHED GRADE AND THE SUBGRADE TO BE RECOMPACTED BEFORE PLACEMENT OF BASE COURSE MATERIALS. PAYMENT WILL BE UNDER ITEM 212.1.

SHOULDER SLOPES OUTSIDE BANKED CURVE SHALL BE APPROXIMATED BY A PARABOLIC CURVE.



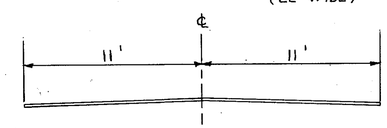
SHOULDER SLOPES
INSIDE BANKED CURVES



SHOULDER SLOPES
OUTSIDE BANKED CURVES

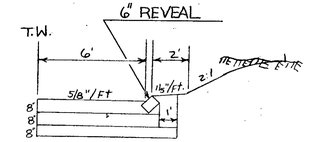
ITEM 411.1 LEVELING COURSE (22' WIDE)

ITEM 411.5 5/8" WEARING COURSE (22' WIDE)

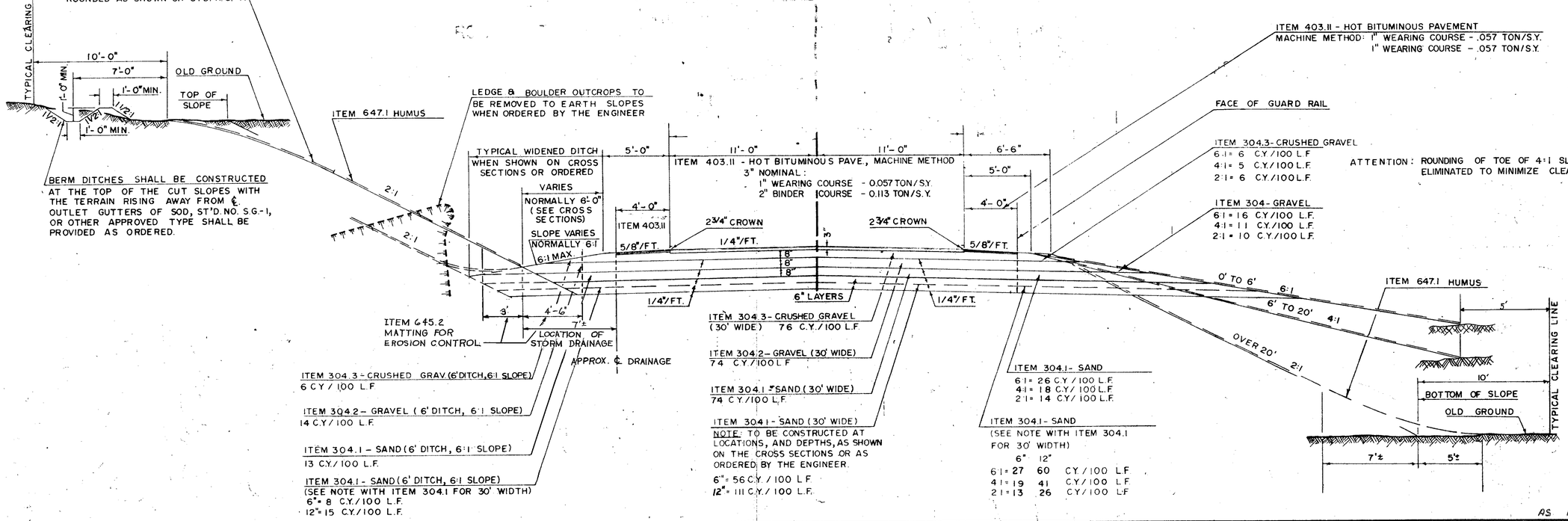


OVERLAY
STA. 81+00 – 95+00

GRANITE SLOPE CURB
6" REVEAL



SEE SUMMARY SHEET FOR LOCATION



ATTENTION: ROUNDING OF TOE OF 4:1 SLOPES HAVE BEEN ELIMINATED TO MINIMIZE CLEARING AND GRUBBING.

AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-7QS-270(9)	2	156

(USE BOTTOM LINES FIRST)

REVISIONS AFTER PROPOSAL

NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS

BOOK NO.	PAGE NO.

BOOK NO.	PAGE NO.

		DATE
PLAN TRACED	J. ROMANO	8/18/78
PLAN CHECKED	P. SAMUEL	8/21/78
PROFILE TRACED		
PROFILE CHECKED		
INKED		
CHECKED		

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

CLEARING AND GRUBBING

ITEM NO.			201.1
ITEM			CLEARING AND GRUBBING
UNIT			ACRE
LOCATION			
24+80 – 26+10	RT.	A	0.04
25+60 – 27+65	LT.	B	0.01
26+55 – 28+05	RT.	C	0.04
27+90 – 30+05	LT.	D	0.10
28+25 – 30+35	RT.	E	0.08
30+00 – 32+20	LT.	F	0.10
30+50 – 31+85	RT.	G	0.09
32+20 – 37+60	RT.	H	0.38
32+30 – 35+90	LT.	I	0.18
35+95 – 39+20	LT.	J	0.17
37+65 – 40+65	RT.	K	0.22
39+20 – 49+50	LT.	L	0.76
40+80 – 45+75	RT.	M	0.37
46+00 – 49+75	RT.	N	0.11
51+50 – 57+55	RT.	O	0.32
51+90 – 52+85	LT.	P	0.04
53+00 – 60+00	LT.	Q	0.36
57+70 – 67+25	RT.	R	0.75
60+55 – 66+85	LT.	S	0.56
67+00 – 67+40	LT.	T	0.01
68+55 – 70+45	LT.	U	0.08
68+60 – 73+15	RT.	V	0.13
71+70 – 74+35	LT.	W	0.05
73+30 – 74+10	RT.	X	0.02
74+25 – 75+65	RT.	Y	0.01
74+50 – 76+35	LT.	Z	0.03
76+45 – 80+50	RT.	AA	0.08
76+55 – 80+75	LT.	BB	0.02
96+50 – 98+85	LT.	II	0.13
97+30 – 97+75	RT.	JJ	0.03
98+65 – 101+05	RT.	KK	0.06
100+25 – 113+30	LT.	LL	0.61
105+40 – 107+60	RT.	MM	0.19
108+70 – 113+90	RT.	NN	0.18
113+40 – 115+00	LT.	OO	0.08
114+00 – 117+45	RT.	PP	0.50
116+25 – 117+50	LT.	QQ	0.03
118+45 – 118+95	RT.	RR	0.06
118+95 – 120+55	RT.	SS	0.11
119+60 – 121+05	LT.	TT	0.06
120+80 – 121+55	RT.	UU	0.04
122+10 – 122+75	RT.	VV	0.02
122+75 – 128+40	LT.	WW	0.22
123+00 – 126+95	RT.	XX	0.43
128+55 – 134+45	LT.	YY	0.35
128+60 – 129+20	RT.	ZZ	0.03
129+30 – 132+15	RT.	CC	0.26
132+50 – 135+55	RT.	DD	0.13
135+65 – 136+25	LT.	EE	0.02
136+00 – 136+50	RT.	FF	0.01
SUB-TOTAL			8.77
ESTIMATE			0.23
TOTAL			9.0

EARTHWORK SUMMARY

UNIT		C.Y.
COMMON EXCAVATION IN SECTIONS		32,061
DRIVE AND APPROACH EXCAVACTION		1,983
TOTAL COMMON EXCAVATION		34,044
COMMON EXCAVATION FOR ESTIMATE	ITEM 203.1	35,000
MUCK EXCAVATION		919
MUCK EXCAVATION FOR ESTIMATE	ITEM 203.4	1,000
COMMON STRUCTURE EXCAVATION		22
SURPLUS TRENCH EXCAVATION		1,905
SUB-TOTAL		37,846
COMMON EXCAVATION FOR FILL		37,386
ROCK EXCAVATION IN SECTIONS (SOLID)		936
BOULDERS, ETC. IN SECTIONS		888
DRIVE AND APPROACH EXCAVATION (BOULDERS ETC.)		69
ROCK OVERBREAKAGE (EST.)		147
ROCK NOT COVERED BY SECTIONS		123
TOTAL ROCK EXCAVATION		2,157
ROCK EXCAVATION FOR ESTIMATE	ITEM 203.2	2,300
ROCK EXPANDED 20%		1,123
ROCK OVERBREAKAGE (EST.)		147
BOULDERS, ETC.		1,074
ROCK STRUCTURE EXCAVATION		76
ROCK FOR FILL		2,420
SECTIONS FILL		36,132
MUCK REPLACEMENT		1,000
DRIVE AND APPROACH FILL		12
TOTAL FILL		37,114
ROCK FOR FILL		2,420
FILL BEFORE EXPANSION		34,724
SHRINAGE FACTOR 20%		
EXPANDED FILL		34,405
COMMON EXCAVATION FOR FILL		37,386
BORROW		6,019
BORROW FOR ESTIMATE	ITEM 203.5	15,000
WASTE (MUCK, ETC.)		460

REMOVING TREES

ITEM NO.		201.2	201.3	201.4
ITEM		REMOVING SMALL TREES	REMOVING LARGE TREES	REMOVING STUMPS
UNIT		EACH	EACH	EACH
38+74	LT.		1	
+78	LT.	1		
+81	LT.	1		
+93	LT.	1		
+96	LT.	1		
49+90	RT.	1		
50+86	LT.		1	
68+35	LT.	1		
+44	LT.	1		
96+46	RT.			1
97+86	RT.	1		
98+08	RT.	1		
+27	RT.	1		
+56	RT.	1		
101+64	RT.	2		
102+37	RT.	1		
+45	RT.	1		
105+74	RT.		1	
108+13	RT		1	
116+65	RT. SCHOOL LINE	1		
119+84	LT.	1		
+94	LT.	1		
120+08	LT.	1		
122+21	LT.	1		
132+15	RT			1
+32	RT.	1		
SUB-TOTAL		21	4	2
ESTIMATE		3	1	1
TOTAL		24	5	3
AS BUILT TOTALS		19	5	1

SURFACING MATERIALS

ITEM NO.	304.1	304.2	304.3	304.95	403.11	403.12	411.1	411.5
ITEM	SAND	GRAVEL	CRUSHED GRAVEL	CR. GRAVEL FOR UNPAVED DRIVES	HOT BIT. PAVEMENT (MACHINE METHOD)	HOT BIT. PAVEMENT (HAND METHOD)	LEVELING COURSE	PLANT MIX SURFACE TREATMENT ASPHALT CEMENT 5/8"
UNIT	CU. YD.	CU. YD.	CU. YD.	CU. YD.	TON	TON	TON	TON
LOCATION								
ROADWAY	15,484	7,104	11,518		3,991			
SHOULDERS	8,216	2,979	1,357					
APPROACHES	906	271	248		172			
DRIVES				1,357		129		
STA. 81+00-95+10							100	121
SUB-TOTAL	24,660	10,354	13,123	1,357	4,163	129	100	121
ESTIMATE	1,340	1,146	877	143	337	21		29
TOTAL	26,000	11,500	14,000	1,500	4,500	150	100	150

NOTE BOOKS

BOOK NO.	PAGE NO.

REVISIONS

DATE	STATION	DESCRIPTION	AFTER PROPOSAL STATION

COMPILED BY		DATE
CHECKED BY		DATE
INKED BY	K. HANSEN	DATE 9/22/79
CHECKED BY		DATE

AS BUILT PLANS

PROJ. No.	SHEET No.	TOTAL SH'TS
RS-TQS-270(9)	3	156

1M 1 68 BRUNING 40-21 50500

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

LANDSCAPING AND SLOPE PROTECTION

ITEM NO.	641.04	642	643.12	644.14	644.33	645.11	645.2	647.1	645.51	588.2	588.3	643.22
ITEM	LOAM 4" DEEP	LIME-STONE	FERTILIZER FOR INITIAL APPLICATION	PARK SEED TYPE 14 (PLS.WT.)	SLOPE SEED TYPE 33 (PLS.WT.)	MULCH	MATTING FOR EROSION CONTROL	HUMUS	HAY BALES FOR TEMP. EROS. CONT.	STONE FOR EROS. CONT. GRADE 2	STONE FOR EROS. CONT. GRADE 3	FERTILIZER FOR REFERTILIZATION
UNIT	SQ.YD.	TON	TON	LBS.	LBS.	ACRES	SQ.YD.	CU.YD.	EA.	CU.YD.	CU.YD.	TON
SUB-TOTAL	2,347	18	3.9	41.6	495	9	2,869	2,261				
ESTIMATE	153	2	0.1	3.4	5	0	131	139	1,000	20	20	4
TOTAL	2,500	20	4.0	45.0	500	9	3,000	2,400	1,000	20	20	4

INCIDENTAL ITEMS

ITEM NO.	ITEM	UNIT	TOTAL
202.101	DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL	UNIT	1
202.102	DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL	UNIT	1
202.103	DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL	UNIT	1
202.104	DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL	UNIT	1
214	FINE GRADING	UNIT	1
608.2	CONCRETE SIDEWALK	S.Y.	20
611.812	INSTALLING DRY HYDRANT SYSTEM	UNIT	2
615.411	CRYSTAL DELINEATORS, SINGLE	EACH	80
618.	UNIFORMED OFFICERS AND FLAGMEN	HOURS	3,000
619.1	MAINTENANCE OF TRAFFIC INCLUDING DUST LAYING	UNIT	1
622.1	STEEL WITNESS MARKERS	EACH	50
622.2	CONCRETE BOUNDS	EACH	75
662.91	DUG WELL	UNIT	1
692	MOBILIZATION	UNIT	1
698.31	FIELD OFFICE (MODIFIED-SPECIAL)	UNIT	1
670.016	REMOVING STONE WALLS	LF	500
1000	TEMPERARY PROJECT WATER POLLUTION CONTROL (SOIL EROSION)	$	1
1001	ON THE JOB TRAINING OF UNSKILLED WORKERS	$	1

CONSTRUCTION SIGNS & WARNING DEVICES

ITEM NO. 619.2
TOTAL = 1 UNIT

SIGN NO.	DESCRIPTION	SIZE	SQ. FT.	NO. REQ'D	TOTAL AREA	POSTS	EASELS
G20-1	ROAD CONSTRUCTION NEXT 2 MILES	4x6	24	2	48	4	
G 20-2	END CONSTRUCTION	3x6	18	4	72	8	
W1-6	ONE WAY ARROW →	2x4	8	4	32		
W1-7	TWO WAY ARROW ←→	2x4	8	4	32		
W5-1	ROAD NARROWS	4x4	16	2	32		2
W1-8	CHEVRON	2x2½	5	10	50	10	
W8-1	BUMP	4x4	16	2	32		2
W8-2	DIP	4x4	16	2	32		2
W8-3	PAVEMENT ENDS	4x4	16	2	32		2
W8-6	TRUCK CROSSING	4x4	16	2	32		2
W13-1	30 M.P.H.	2x2	4	2	8		
W20-1a	ROAD CONSTRUCTION (AHEAD)	4x4	16	4	64	16	
W20-1b	ROAD CONSTRUCTION (500 FT.)	4x4	16	2	32	4	
W20-1c	ROAD CONSTRUCTION (1000FT.)	4x4	16	2	32	4	
W20-1d	ROAD CONSTRUCTION (1500FT.)	4x4	16	2	32	4	
W20-4a	ONE LANE ROAD (AHEAD)	4x4	16	4	64		4
W20-7a	FLAGMAN (AHEAD)	4x4	16	6	96		6
W20-9	BE PREPARED TO STOP	4x4	16	4	64		4
W20-11a	WORK AREA (AHEAD)	4x4	16	2	32		2
	BARRICADES TYPE II			50			
	WARNING LIGHTS TYPE A OR C			50			
	HAZARD MARKERS 18" CLUSTER			10			
	DELINEATORS VP-1 (8"x24")			50			
	D-100 (3"x6")			100			
	TRAFFIC CONES 28" ORANGE			100			
	SIGN PADDLES			4			

SCARIFYING

ITEM NO.	212.1
UNIT	SQ. YD.
LOCATION	
117+25 - 118+25	383
120+75 - 123+25	1,242
125+25 - 130+25	2,126
133+75 - 136+75	1,474
SUB-TOTAL	5,225
ESTIMATE	275
TOTAL	5,500.0
AS BUILT TOTAL	3,880.

CURBING

ITEM NO.		609.26
ITEM	MARK NUMBER	STRAIGHT GRANITE SLOPE CURB 6" HIGH
UNIT		LIN. FT.
LOCATION		
~~49+50 - 50+60~~ ~~49+31 - 50+60~~ LT.	1-1	110 108.0
~~67+60 - 68+00~~ ~~67+58 - 68+10~~ LT.	2-1	40 52.1
~~67+90 - 68+70~~ ~~67+82 - 68+69~~ RT.	3-1	80 87.0
99+40 - ~~99+95 LT~~ ~~100+04~~	8-1	55 64.5
SUB-TOTAL		285
ESTIMATE		15
TOTAL		300
AS BUILT TOTAL		311.6

FENCING

ITEM NO.	607.1	607.20/2	607.41	670.041	607.9
ITEM	WOVEN WIRE FENCE	12 FT. WOVEN WIRE GATE'S	POST ASSEMBLIES FOR WOVEN WIRE FENCE	CEDAR RAIL FENCE	RESETTING RAILING AND FENCING
UNIT	LIN. FT.	EACH	EACH	LIN. FT.	LIN. FT.
LOCATION					
~~49+85± - 50+95± RT~~	~~110~~	~~1~~	~~4~~		
95+25± - 95+90± LT					~~65~~ 64.2
~~97+75± - 98+60± RT~~ ~~97+41 - 97+50~~				85	
51+45 - 53+30± RT	189.7	1	4		
SUB-TOTAL	110	1	4	85	65
ESTIMATE	10	–	–	15	10
TOTAL	120	1	4	100	75
AS BUILT TOTALS	189.7	1	4	10.4	64.2

NOTE BOOKS — BOOK NO. / PAGE NO.

REVISIONS — DATE / DESCRIPTION / BY / AFTER PROPOSAL STATION / STATION

COMPILED BY — DATE
CHECKED BY — DATE
INKED BY — DATE
CHECKED BY — DATE

AS BUILT PLANS

PROJ. No.	SHEET No.	TOTAL SH'TS
RS-TQS-270(9)	4	156

1M 1 68 BRUNING 40-21 50500

SUMMARY OF QUANTITIES (ESTIMATED)

THIS INFORMATION IS FOR BIDDING PURPOSES ONLY

* NOT AN ITEM TOTAL

DRAINAGE SUMMARY

ITEM NO.	202.41	202.42	202.5	206.1	206.2	603 .14015	603 .14018	603 .14024	603.14236	603 .36115	603 .36118	603 .36124	603 .36136	603.59012	604.12	604.15	605 .112	605 .115	605.79	605.906				REMARKS
ITEM	REMOVAL OF EXISTING PIPE 0-24" DIA.	REMOVAL OF EXISTING PIPE, OVER 24"	REMOVAL OF CB'S DI'S & M.H.'S	COMMON STRUCTURE EXCAVATION	ROCK STRUCTURE EXCAVATION	BITUMINOUS COATED CORRUGATED STEEL PIPE, 0.064" 15"	18"	24"	BITUMINOUS COATED CORRUGATED STEEL PIPE, 0.079" 36"	BITUMINOUS COATED STEEL END SECTIONS 15"	18"	24"	36"	PIPE FOR DRIVES & MINOR APPROACHES 12"	CATCH BASINS TYPE-B	CATCH BASINS TYPE-E	PERFORATED, CORRUGATED STEEL PIPE UNDERDRAIN 12"	15"	UNDERDRAIN FLUSHING BASIN	PIPE UNDERDRAIN 6"	45° BENDS 6"	12"	15"	
UNIT	L.F.	L.F.	EACH	C.Y.	C.Y.	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH	EACH	L.F.	EACH	EACH	L.F.	L.F.	EACH	L.F.				
LOCATION																								
27+50 — 30+45 LT.																				304	2			
27+50 — 30+63 RT.																		322					2	
30+50 LT - 30+65 RT.						43										2								
30+52 — 32+48 LT.																1	202					2		
30+67 — 33+50 RT.																				286	1			
28+00 LT.														26										
32+52 — 35+98 LT.																				353	2			
36+02 — 38+00 LT.																1				201	1			
38+88	33				2																			
39+30 ±				4		70										1								
39+32 — 42+00 LT.																				268	1			
49+80 RT.														20										
42+04	32				1	61										1								
44+89	38				2	138				2														
48+75 — 51+50 LT.																				278	1			
48+75 — 51+50 RT.																				278	1			
53+50				18		42										1								
57+51 RT.														20										
53+52 — 56+98 LT.																1				352	2			
53+52 — 56+98 RT.																1	352					2		
54+83 (SKEW)	31				3	72				1														
57+02 — 60+50 LT																				351	1			
57+02 — 60+50 RT.																				351	1			
59+70 (SKEW) LT.														40										
62+90		39			4				156				2											
66+75 — 71+70 LT.																				498	1			
66+75 — 71+75 RT.																				507	1			
71+74	48				2		75				1													
71+80 — 76+50 LT.																				476	1			
71+80 — 76+50 RT.																				480	1			
78+85	43				3		63				1													
97+35 — 103+25 LT.																				606	1			
97+40 (SKEW)	40				2			92				2												
97+50 — 98+63 RT.																1	128					2		CB AT 98+65
98+60 (SKEW)	50																							
107+75 LT.														20										
98+67 — 102+25 RT.																				361	2			
102+47	31																							
102+50 — 103+33 RT.																				87	1			
103+40 ± (SKEW)	36		1			55										1								
103+37 — 105+50 RT.																				216	1			
108+59 RT.														20										
103+55 — 105+50 LT.																				201	1			
96+55 — 97+45 RT.															1		101							
106+10	47					80				1														
106+10 — 116+00 LT.					58														1	1010	2			
110+00 — 114+75 RT.					25															484	2			
118+30 LT.														28										
117+37	28				2	84				1														
123+98 ±	34				3																			
124+20 (SKEW)							98				1													
128+25 (SKEW)	38		1		1	60				1						1								
121+96 RT.														24										
122+03 (SKEW) LT.														24										
122+32 LT.														24										
91+00 (SKEW)					5	45				1														
42+06 — 43+50 LT																				146				
SUB-TOTAL	529	39	2	22	113	750	236	92	156	7	3	2	2	246		12	783	322	1	8247				
ESTIMATED	11	11	—	3	12	25	24	8	14	1	1	1	1	29	1	2	67	18	2	153				
TOTAL	540	50	2	25	125	775	260	100	170	8	4	3	3	275	2	14	850	340	3	8400	27	6	3	
AS BUILT TOTALS	413	37	2			693.1	394.8	83.7	157.2	4	5	2	2	271.3	1	14	1363.0	342.7	3	8479.3				

NOTE BOOKS — BOOK NO. / PAGE NO.

PROPOSAL — DESCRIPTION

AFTER — STATION

REVISIONS — DATE / STATION

COMPILED BY K. HANSEN — DATE 8/17/79

CHECKED BY J. DOWIE — DATE 8/20/79

INKED BY — DATE

CHECKED BY — DATE

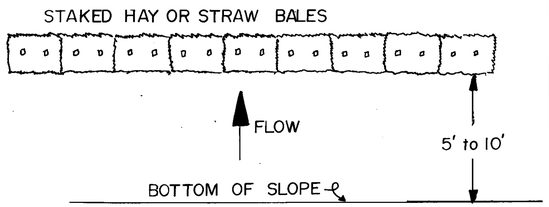
AS BUILT PLANS

PROJ. No.	SHEET No.	TOTAL SHTS.
RS-TQS-270(9)	5	156

1M 1 68 BRUNING 40-21 50500

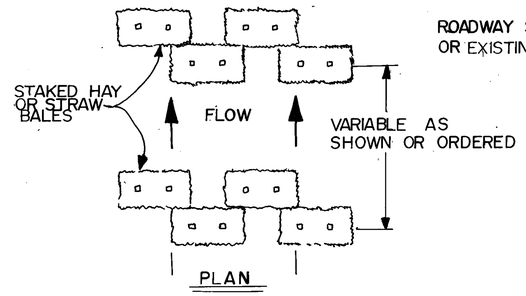
STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.			

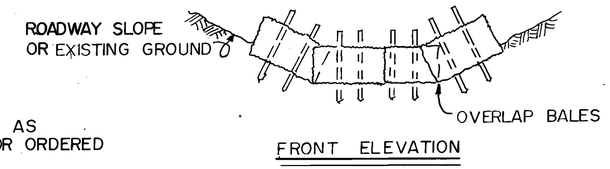
TYPICAL TEMPORARY EROSION CONTROL MEASURES



EROSION PROTECTION TYPE "A"

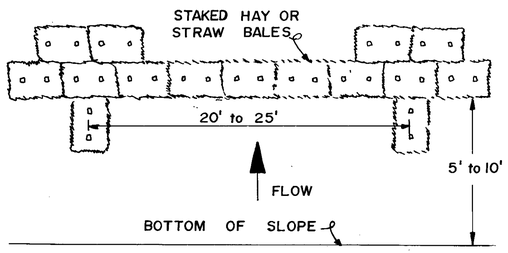
NORMAL USE AT BOTTOM OF FILL SLOPE





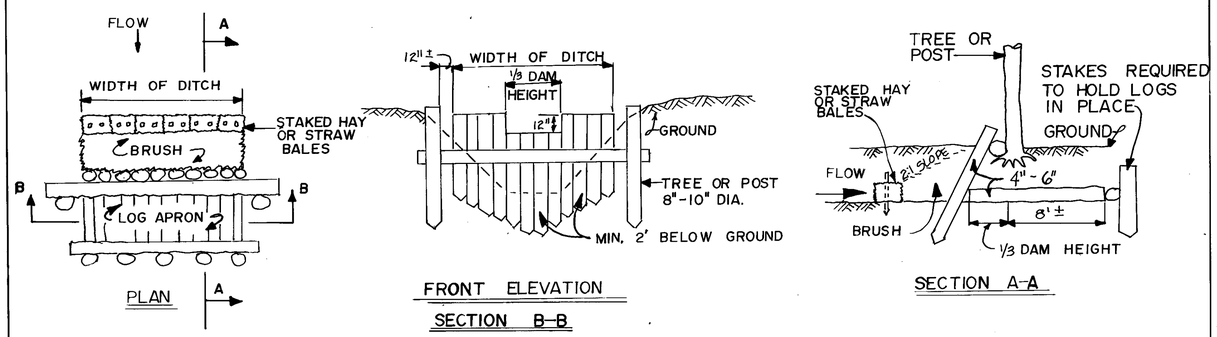
EROSION PROTECTION TYPE "D"

NORMAL USE IN WIDE DITCH SECTION



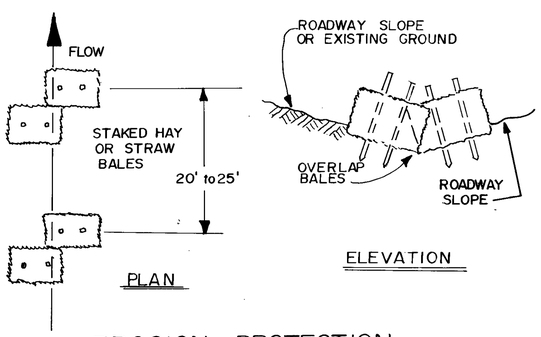
EROSION PROTECTION TYPE "B"

NORMAL USE AT BOTTOM OF FILL SLOPE WHERE HEAVY FLOW MAY BE ANTICIPATED.



EROSION PROTECTION TYPE "E"

NORMAL USE IN, OR JUST UPSTREAM OF WATER COURSE



EROSION PROTECTION TYPE "C"

NORMAL USE IN NARROW DITCH SECTION

GENERAL NOTES

1. BALED HAY AND STRAW WILL BE PAID UNDER ITEM 645.51.
2. STAKES TO HOLD BALES SHALL BE 2" by 2" OR EQUIVALENT SAPLINGS AND SHALL BE LONG ENOUGH TO EXTEND 1 FOOT MINIMUM INTO THE GROUND. STAKES, LOGS, AND BRUSH WILL BE SUBSIDIARY.
3. BALES SHALL BE SET 3± INCHES BELOW GROUND SURFACE OR AS ORDERED. ANY REQUIRED EXCAVATION TO SET BALES WILL BE SUBSIDIARY.
4. HAY BALES WILL BE ALLOWED TO ROT IN PLACE EXCEPT IN HIGHLY VISIBLE AREAS WHERE THE ENGINEER MAY ORDER REMOVAL AS SUBSIDIARY WORK.

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)				
NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS			
BOOK NO.	PAGE NO.	BOOK NO.	PAGE NO.

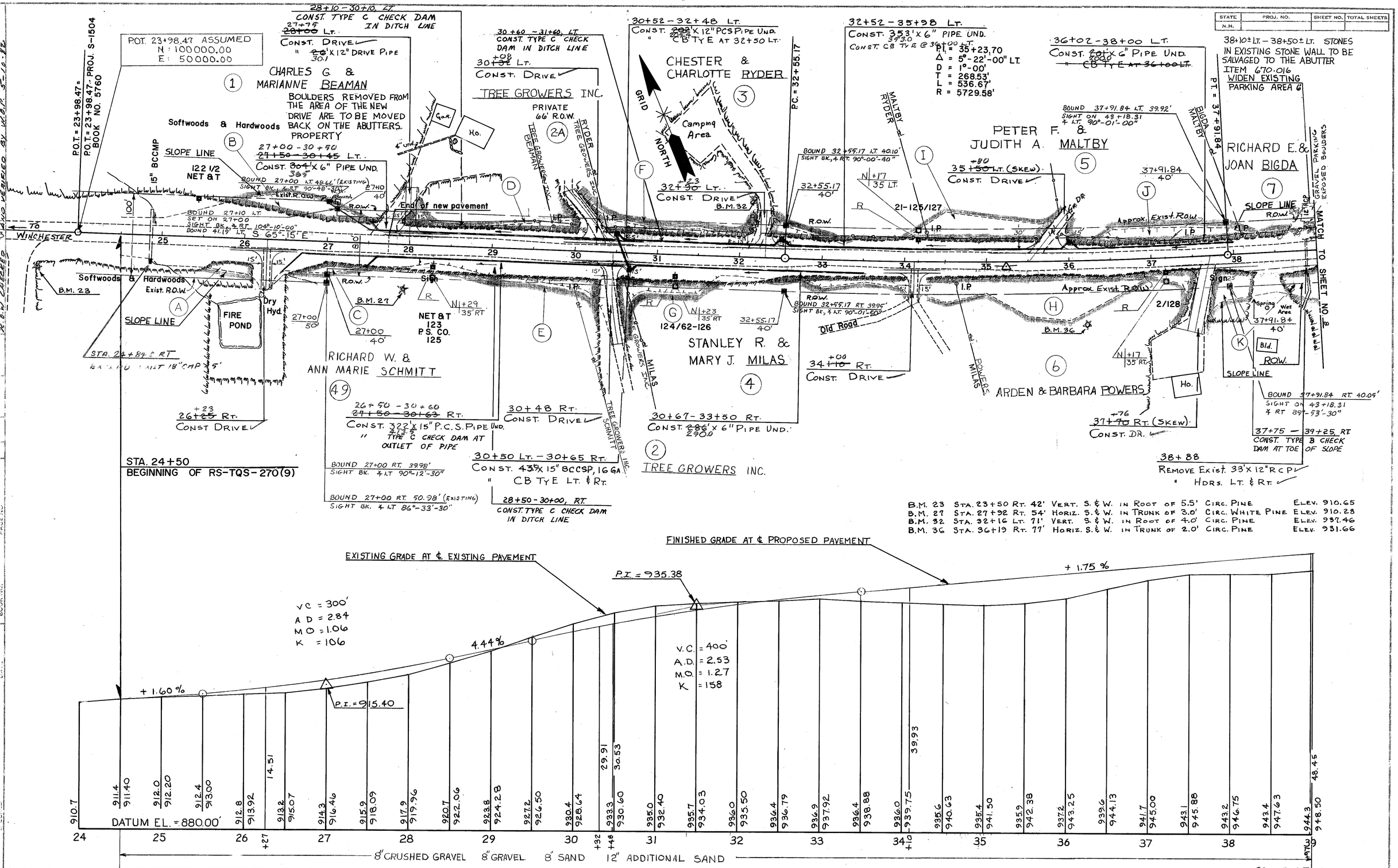
PLAN TRACED	Jr. Amuse	DATE 5/16/79	
PLAN CHECKED			
PROFILE TRACED			
PROFILE CHECKED			
INKED			
CHECKED			

AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	6	156

UNING 34582

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			



AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	7	156

Richmond 5-2562

USE BOTTOM LINES (FIRST)

R.O.W. CHECKED AND VERIFIED BY W.O.R. 5-18-81

NO.	DATE	STATION	DESCRIPTION

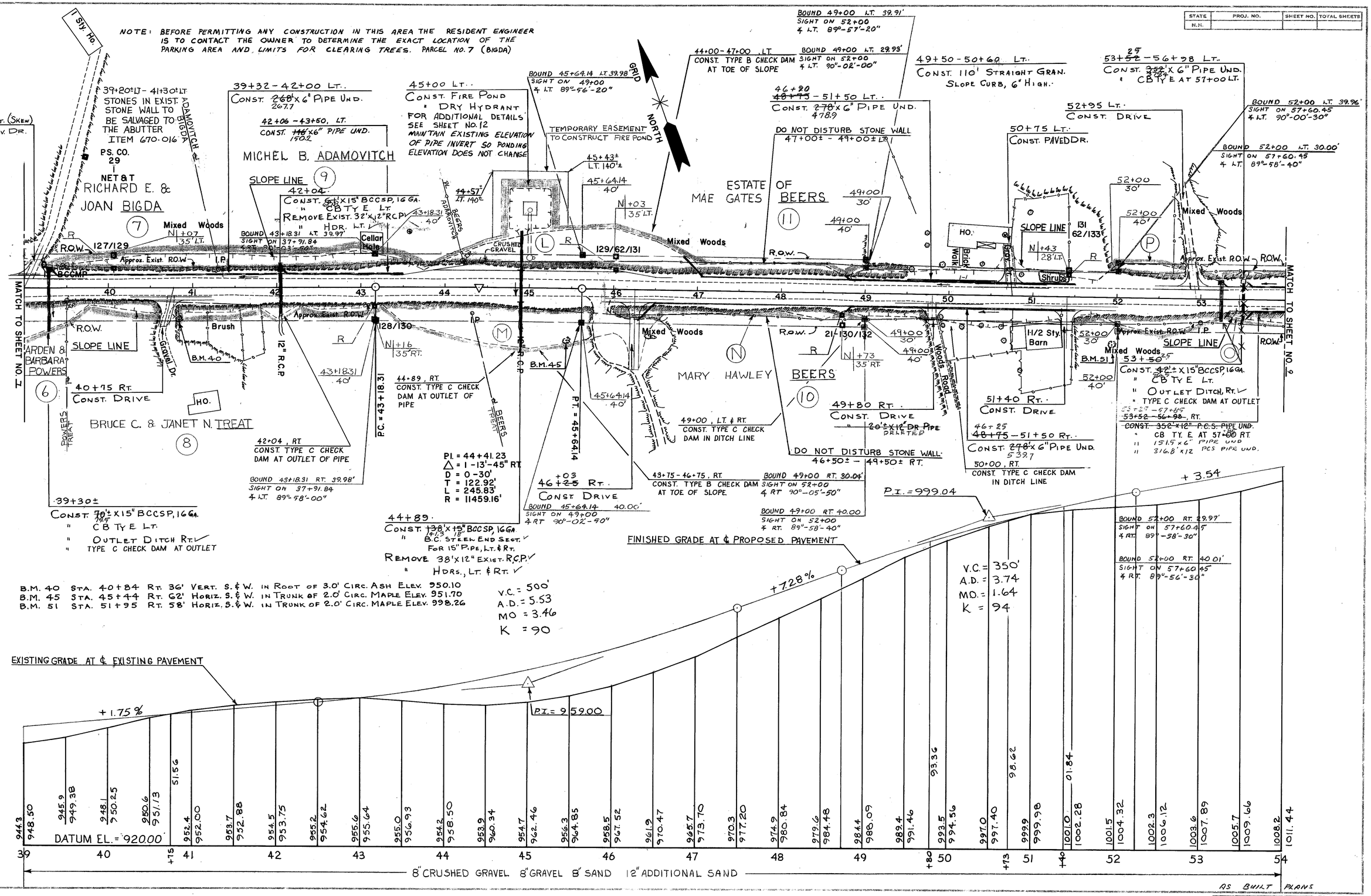
REVISIONS AFTER PROFILE

NOTEBOOKS

PLAN TRACED S. E. LUDWICK	DATE 20 AUG 75	BOOK NO.	FOLDER
PLAN CHECKED			
PROFILE TRACED S. E. LUDWICK	10 SEPT 75		
PROFILE CHECKED			
INVER			
CHECKED		BOOKING	PAGE NO.

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			

NOTE: BEFORE PERMITTING ANY CONSTRUCTION IN THIS AREA THE RESIDENT ENGINEER IS TO CONTACT THE OWNER TO DETERMINE THE EXACT LOCATION OF THE PARKING AREA AND LIMITS FOR CLEARING TREES. PARCEL NO. 7 (BIGDA)



AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270 (9)	8	156

Richmond 5-8562

(USE BOTTOM LINES FIRST)

NO.	DATE	STATION	DESCRIPTION
1			R.O.W. SHEETS AND VERIFIED BY W.R.P. 5-18-82

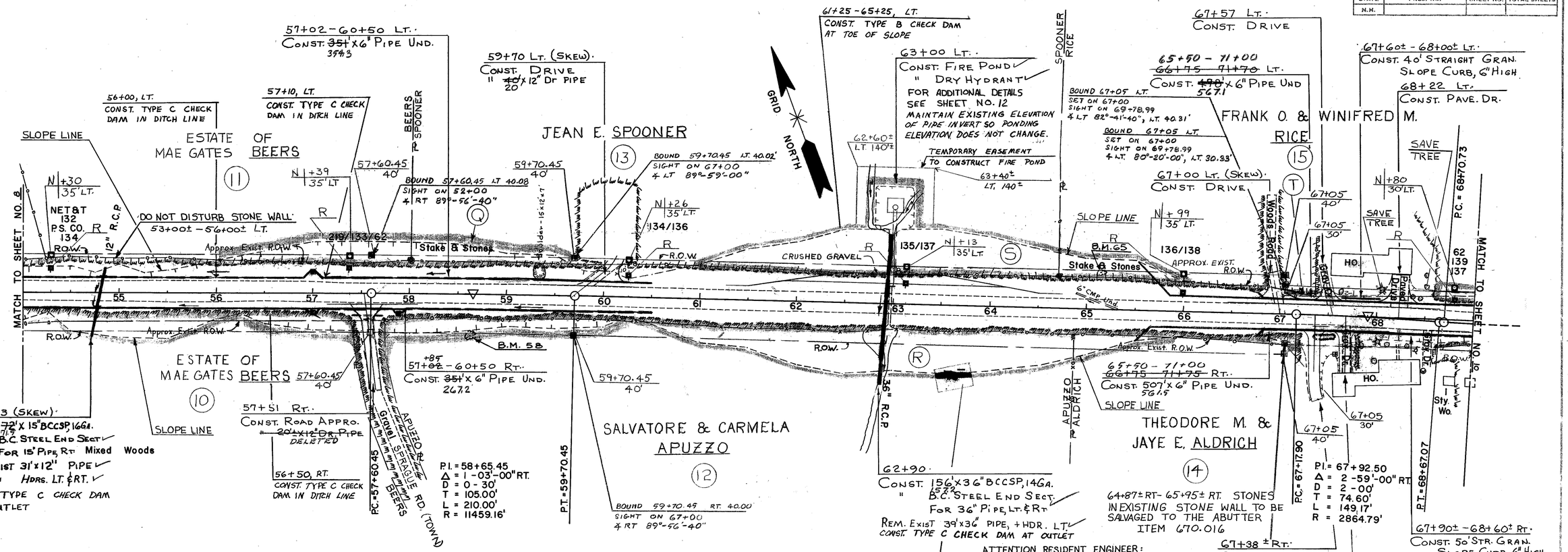
NOT TO SCALE

BASE NO.	PAGE NO.

BOOK NO.	DATE

		DATE
PLAN TRACED	S.E. LUDWICK	20 AUG 75
PLAN CHECKED		
PROFILE TRACED	S.E. LUDWICK	10 SEPT 75
PROFILE CHECKED		
CHECKED		

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			



B.M. 58 STA. 58+61 RT. 42' HORIZ. S. & W. IN TRUNK OF 3.0' CIRC. WHITE PINE ELEV. 1025.63
B.M. 65 STA. 65+15 LT. 38' VERT. S. & W. IN ROOT OF 3.0' CIRC. WHITE PINE ELEV. 1025.16

USE BOTTOM LINES FIRST!

REVISIONS AFTER ADVERTISEMENT

NO.	DATE	STATION	STATION	DESCRIPTION
				R.O.W. CHANGES AND VERIFIED BY W.A.B. 5-11-62

NOTEBOOKS

		PAGE NO.	
		EZOK NO.	
		BOOK NO.	

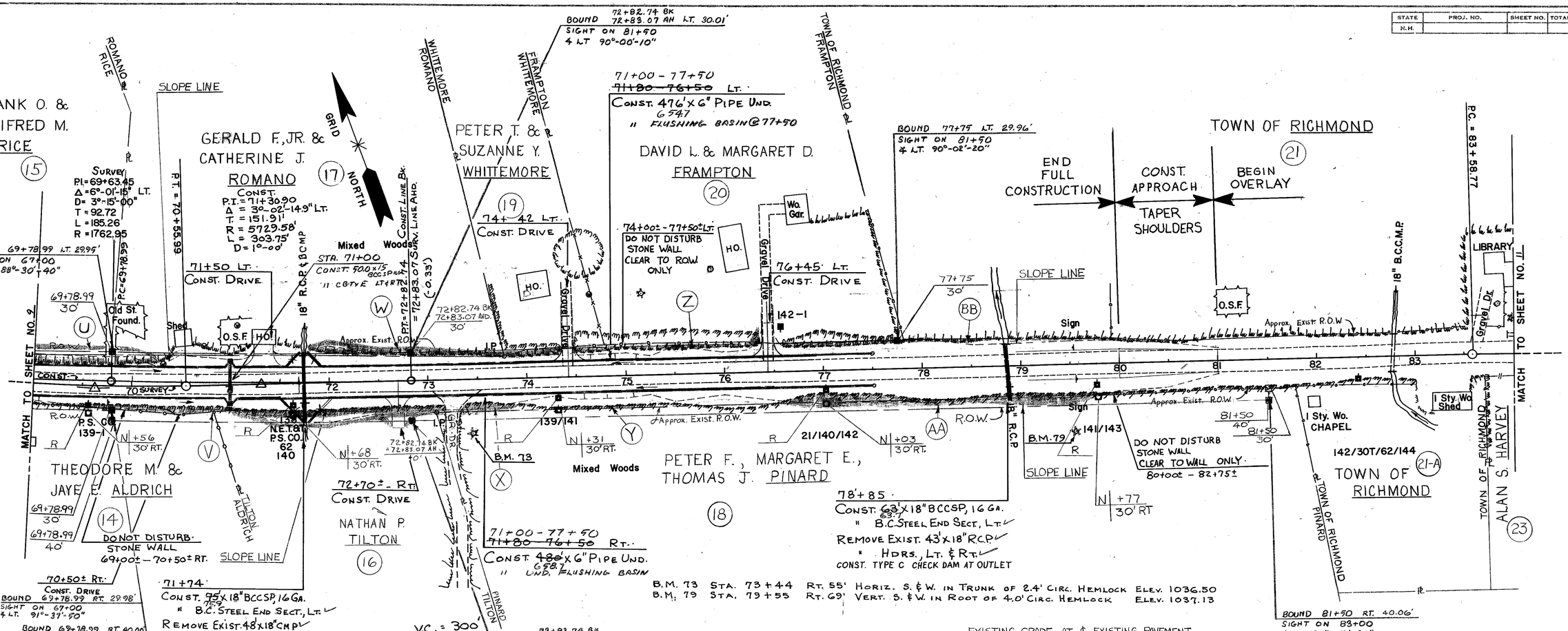
		DATE
PLAN TRACED	S.E. LUDWICK	25AUG75
PLAN CHECKED		
PROFILE TRACED	S.E. LUDWICK	10 SEPT 75
PROFILE CHECKED		
INKED		
CHECKED		

AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	9	156

Richmond 5-25-62

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			



NO.	DATE	STATION	STATION	DESCRIPTION
				R.W. CHECKED AND VERIFIED BY W.A.R. 5-12-82

(USE BOTTOM LINES FIRST)

REVISIONS AFTER PROPOSAL

NOTEBOOKS

BOOK NO.	PAGE NO.	BOOK NO.	PAGE NO.

PLAN TRACED	S.E. LUDWICK	DATE 26AUG75	
PLAN CHECKED			
PROFILE TRACED	S.E. LUDWICK	10SEPT75	
PROFILE CHECKED			
LINED			
CHECKED			

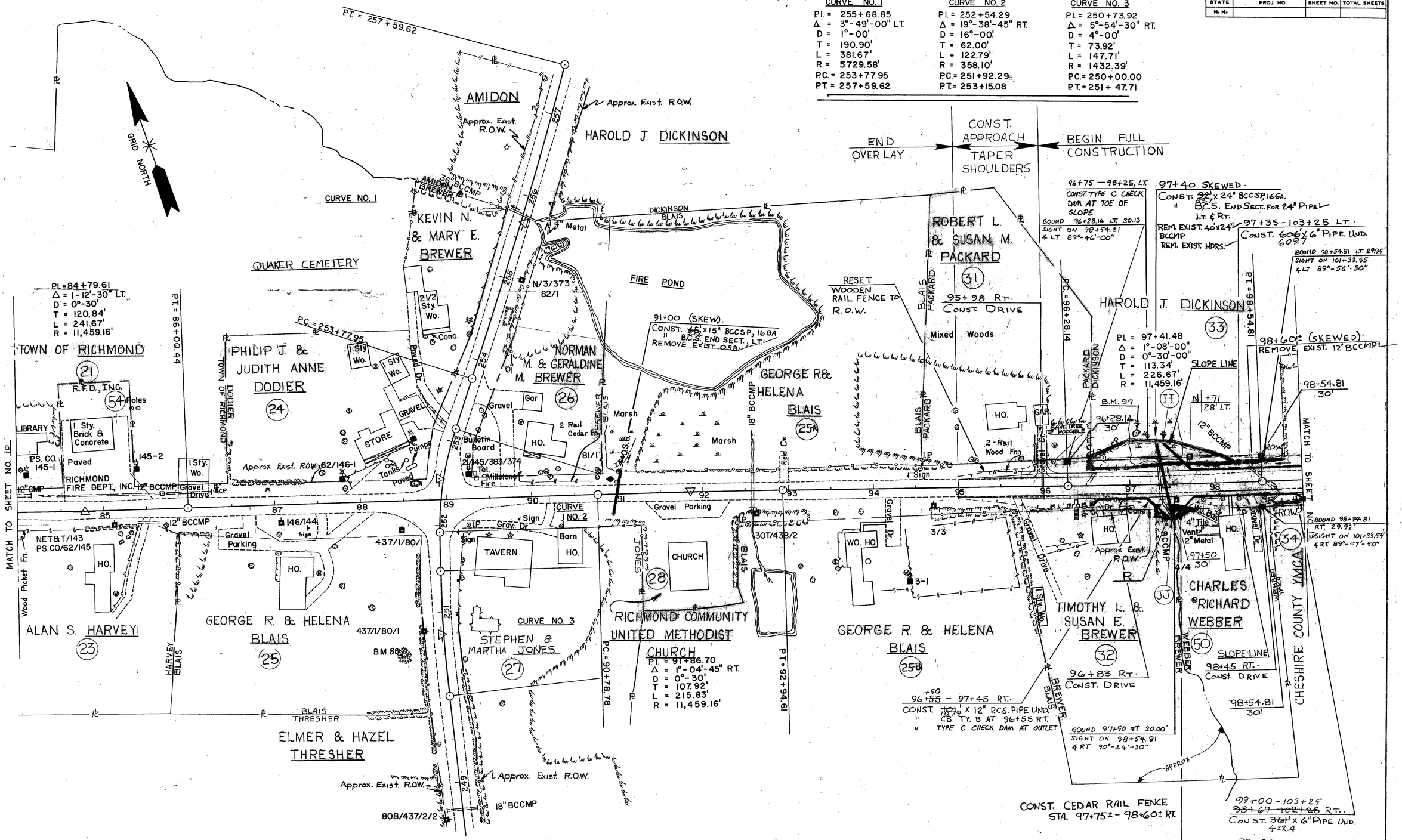
PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	10	156

AS BUILT PLANS

Richmond 5-8562

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N. H.			

CURVE NO. 1	CURVE NO. 2	CURVE NO. 3
P.I. = 255+68.85	P.I. = 252+54.29	P.I. = 250+73.92
Δ = 3°-49'-00" LT.	Δ = 19°-38'-45" RT.	Δ = 5°-54'-30" RT.
D = 1°-00'	D = 16°-00'	D = 4°-00'
T = 190.90'	T = 62.00'	T = 73.92'
L = 381.67'	L = 122.79'	L = 147.71'
R = 5729.58'	R = 358.10'	R = 1432.39'
P.C. = 253+77.95	P.C. = 251+92.29	P.C. = 250+00.00
P.T. = 257+59.62	P.T. = 253+15.08	P.T. = 251+47.71



B.M. 88 STA. 88+50 RT. 179' STANDARD U.S.G.S. TABLET STAMPED C 21 1932 ELEV. 1061.696
B.M. 97 STA. 97+07 LT. 62' HORIZ. S. & W. IN TRUNK OF 1.5' CIRC. WHTE BIRCH ELEV. 1055.25

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	11	56

Richmond 5-2562

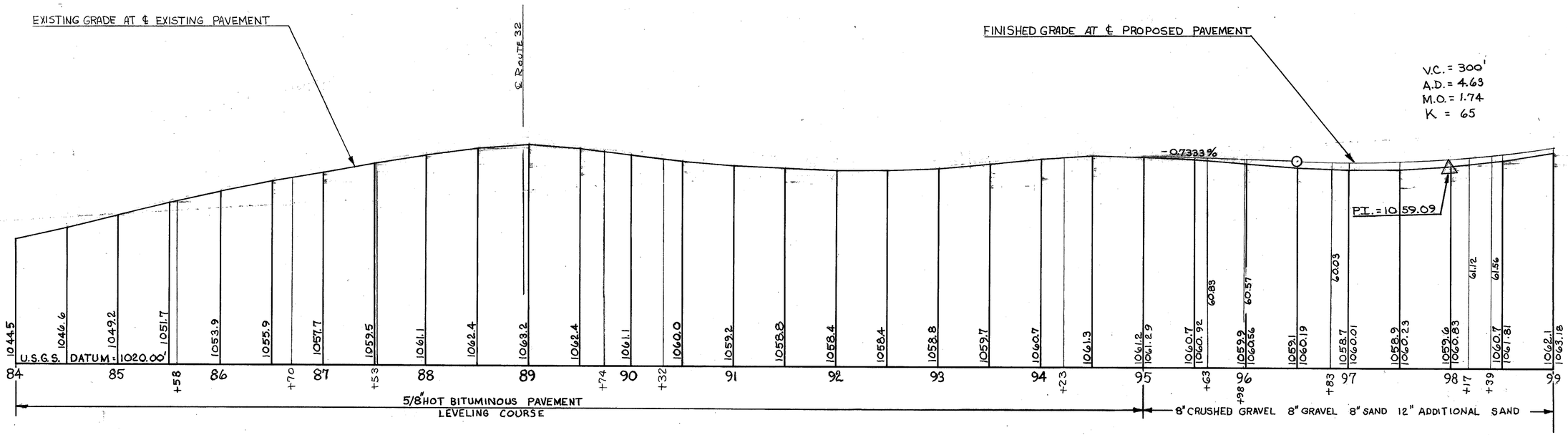
(USE BOTTOM LINES FIRST)

REVISIONS AFTER PROPOSAL			
NO.	DATE	STATION	STATION	DESCRIPTION
				R.O.W. ERRORS AND VERIFIED BY W.O.R. 5-10-76

NOTEBOOKS			
BOOK NO.	PAGE NO.	BOOK NO.	PAGE NO.

		DATE 1 Nov 76
PLAN TRACED	S.E. Ludwick	
PLAN CHECKED		
PROFILE TRACED		
PROFILE CHECKED		
INKED		
CHECKED		

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			

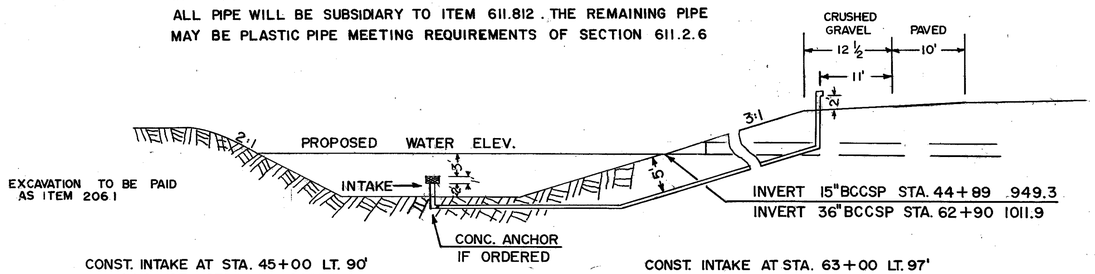


ITEM 611.812 DRY HYDRANT SYSTEMS

SHALL CONSIST OF FURNISHING AND INSTALLING A DRY HYDRANT, INTAKE WITH SCREEN, AND 4" PIPE FROM THE INTAKE TO THE HYDRANT. PLASTIC PIPE WILL NOT BE ACCEPTABLE FOR THE ALL PIPE WILL BE SUBSIDIARY TO ITEM 611.812

PLASTIC PIPE WILL NOT BE ACCEPTABLE FOR THE VERTICAL INTAKE, (FROM THE CONCRETE ANCHOR TO THE STRAINER SCREEN)

ALL PIPE WILL BE SUBSIDIARY TO ITEM 611.812. THE REMAINING PIPE MAY BE PLASTIC PIPE MEETING REQUIREMENTS OF SECTION 611.2.6



CONST. INTAKE AT STA. 45+00 LT. 90'
(INCLUDE STRAINER SCREEN)
CONST. DRY HYDRANT AT STA. 45+00 LT. 32'
CONST. 71' x 4" WATER PIPE STA. 45+00 LT. 32' TO LT. 90'

CONST. INTAKE AT STA. 63+00 LT. 97'
(INCLUDE STRAINER SCREEN)
CONST. DRY HYDRANT AT STA. 63+00 LT. 32'
CONST. 77' x 4" WATER PIPE STA. 63+00 LT. 32' TO LT. 97'

DRY HYDRANT & INTAKE DETAIL

SCALE 1" = 10'

REVISIONS AFTER PROPOSAL (USE BOTTOM LINES FIRST)

NO.	DATE	STATION	STATION	DESCRIPTION

NOTEBOOKS

DATE		BOOK NO.	PAGE NO.
10 SEPT 75			

PLAN TRACED	S.E. LUDWICK
PLAN CHECKED	
PROFILE TRACED	
PROFILE CHECKED	
INKED	
CHECKED	

AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	18	156

Richmond 52562

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			

NOTE: THE OWNER OF PARCEL NO. 35 (NICHOLS) SHALL BE CONTACTED PIOR TO ANY WORK RELATED TO CONSTRUCTING THE DUG WELL AT 108+95 LT. 90'

99+20 LT.
CONST. DRIVE

99+40± – 99+95± LT.
CONST. 55' STR. GRAN. SLOPE CURB, 6" HIGH

HAROLD J. DICKINSON (33)

BOUND 101+33.55 LT. 40.01'
SIGHT ON 102+33.55
& LT. 90°-34'-30"

BOUND 101+33.55 LT. 29.98'
SIGHT ON 102+33.55
& LT. 90°-44'-30"

102+47.
REMOVE EXIST. 31"X12" C.M.P.

BOUND 102+33.55
SET ON 102+50
SIGHT 104+80.84
& LT 112°-20'-20"
BOUND 43.32' LT.

103+40± SKEWED.
CONST. 55'±X15" BCCSP, 16GA.
" CB TYE. RT.
REM. EXIST. 36'X12" CMP
" " CB RT.
CONST. TYPE C CHECK DAM AT OUTLET

DO NOT DISTURB STONE WALL.
100+50± – 112+25±

BOUND 104+80.84 LT. 32.98'
SIGHT 109+25.72
& LT 89°-36'-50"

GEORGE J. & YVONNE N. NICHOLS (35)

107+~~95~~ +95 LT.
CONST. DRIVE
" 20'X12" DRIVE PIPE

BOUND 111+70.17 LT. 40.06'
SIGHT ON 113+12.19
& LT 89°-58'-30"

106+10 – 116+~~00~~ +25 LT.
CONST. 1010'X6" PIPE UND.
" FLUSHING BASIN AT 111+00±

BOUND 109+25.72 LT. 40.00'
SIGHT ON 108+00
& RT 90°-01'-30"

DO NOT DISTURB STONE WALL
100+50± – 112+25± LT.

112+70± LT.
CONST. PAVED DRIVE
SEE TYPICAL SECT., THIS SHEET FOR ADD. DETAIL

GERALD & SUSAN MERRIFIELD (38)

BOUND 113+12.19 RT. 50.00'
SIGHT ON 111+70.17
& RT. 90°-02'-20"

GUY HOLLIS PACKARD (39A)

GRID NORTH

108+95, LT 90'.
CONST. DUG WELL

108+70±
LT. 115'±

109+20±
LT. 115'±

109+25.72
40'

TEMPORARY EASEMENT TO CONSTRUCT WELL

SLOPE LINE

Mixed Woods

103+55 – 105+50 LT.
CONST. 20'X 6" PIPE UND.
219.0'
B.M. 104

P.I. = 104 + 80.84
Δ = 0°-31'-15" LT.
104+80.84
40'

106+10.
CONST. ~~60'~~ 15" BCCSP, 16GA.
~~" B.C.S. END SECT. FOR 15" PIPE, LT. DELETED~~
REM. EXIST. 47'X15" CMP
CONST. TYPE C CHECK DAM AT OUTLET

2' Ditch

Spring

I.P.

Approx. Exist. R.O.W.

BM 111

111+70.17
40'

113+12.19
50'

P.C. = 113+77.70

MATCH TO SHEET NO. 11

MATCH TO SHEET NO. 14

101+33.55
40'

N +94
28' LT.

102+33.55
40'

N +91
28' LT.

12" B.C.C.M.P.

15" B.C.C.M.P.

Ditch

Sign

SURVEY

CONST.

Chain

Grass Dr.

Gravel Dr.

Gravel Road

Poles

Barn

2 1/2 Sty. Wo. HO.

SAVE TREE IF POSSIBLE

JOHN M. & PRISCILLA W. LONGDEN (36)

LONGDEN Y.M.C.A.

LONGDEN TARR

FIRE POND

Cellar Hole

Sheds

TRAILER

PHYLLIS E. TARR (37)

CHARLES H. & SHARON E. CASE (55)

CASE TARR

PACKARD

MERRIFIELD NICHOLS

CHESHIRE COUNTY Y.M.C.A. (34)

101+33.55
30'

BOUND 101+33.55 RT. 30.08'
SIGHT ON 102+33.55
& RT. 89°-48'-40"

101+25 RT.
DEMOLISH BLDG. SUBJ. TO PRIOR REMOVAL BY MAY 31, 1980
FOUNDATION TO BE BACKFILLED & GRADED; CONST. LOAM AND OTHER RELATED ITEMS.

P.C. = 101+33.55

P.T. = 102+33.55

102+33.55
30'

6/438/6

81A
P.S. CO. 5/81
5
NET & TN

N +59
28' RT.

KK

SLOPE LINE

Approx. Exist. R.O.W.

HO.

R.O.W.

R

N +87
28' RT.

8/8

Mixed Woods

105+76±
RT. 96'

MM

106+83±
RT 96'±

9/9

N +76
28' RT

108+00
30'

109+25.72
40'

P.C. = 109+25.72

Mixed Woods

81/00/438/10

N +52
35' RT.

NN

111+70.17
40'

P.C. = 110+20.63

P.T. = 111+67.30

N +84
35' RT.

113+12.19
40'

SLOPE LINE

113+00 – 115+10
110+00 – 114+75 RT.
CONST. ~~484~~ 496'X6" PIPE UND

BOUND 113+12.19 RT. 40.01'
SIGHT ON 111+70.17
& LT 90°-01'-20"

CONST.
P.I. = 110+48.00
Δ = 4°-16'-40.14" RT.
T = 122.28'
R = 3274.05'
L = 244.45'
D = 1°-45'

SURVEY
P.I. = 110+93.97
Δ = 1°-28'-00" RT.
D = 1°-00'-00"
T = 73.34
L = 146.67
R = 5729.58

BOUND 109+25.72 RT. 40.00'
SIGHT ON 108+00
& LT 89°-57'-10"

BOUND 108+00 RT. 30.38'
SIGHT ON 109+25.72
& RT 89°-22'-40"

CONST. P.T. = 111+70.17

P.I. = 101+83.55
Δ = 1°-00'-00" RT.
D = 1°-00'-00"
T = 50.00
L = 100.00
R = 5729.58

102+10± SKEWED.
CONST. DRIVE

~~102+50 – 103+33 RT.~~
~~CONST. 87'X 6" PIPE UND.~~

102+25 – 104+25 RT
NARROW DITCH

103+37 – 105+50 RT.
CONST. ~~216'~~ 217'X 6" PIPE UND.

BOUND 102+33.55
SET ON 102+50
SIGHT ON 104+80.84
& RT 118°-47'-30"
BOUND 34.18' RT.

103+77± RT.
CONST. DRIVE
104+80.84
30'

DO NOT DISTURB STONE WALL
102+50± – 105+50±

BOUND 104+80.84 RT 30.02'
SIGHT ON 108+00
& RT 90°-29'-20"

106+25± RT.
RECONST. FIRE POND

TEMPORARY EASEMENT TO CONSTRUCT FIRE POND

108+54 +82 RT.
CONST. DRIVE
" 20'X12" DR. 129' PIPE
REM. 12" BCCMP

108+50 RT.
DEMOLISH BLDG. SUBJ. TO PRIOR REMOVAL BY MAY 1, 1980

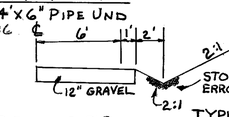
105+25 – 107+25, RT.
CONST. TYPE B CHECK DAM AT TOE OF SLOPE

99+00 – 103+00, RT.
CONST. TYPE C CHECK DAM IN DITCH LINE

101+69± – 101+83±, RT.
STONE'S IN EXIST. STONE WALL TO BE SALVAGED TO THE ABUTTER
ITEM 670.016

B.M. 104 STA. 104+56 LT. 85' VERT. S. & W. IN ROOT OF 5.6' CIRC. WHITE PINE ELEV. 1073.65
B.M. 111 STA. 111+97 RT. 79' HORIZ. S. & W. IN TRUNK OF 2.6' CIRC. WHITE PINE ELEV. 1096.48

BOUND 111+70.17 RT. 40.02'
SIGHT ON 113+12.19
& RT. 89°-58'-00"



TYPICAL DRIVE
STA. 112+70± LT.
(NOT TO SCALE)

P.I. = 1102.33

FINISHED GRADE AT ℄ PROPOSED PAVEMENT

V.C. = 300'
A.D. = 2.60
M.O. = 0.98
K = 116

+3.42 %

V.C. = 700'
A.D. = 8.22
M.O. = 7.19
K = 85

EXISTING GRADE AT ℄ EXISTING PAVEMENT

P.I. = 1074.70

+0.82 %

+390%

VC = 300'
A.D. = 3.09
M.O. = 1.16
K = 97

P.I. = 1078.39

Station	Elevation	Distance
99	1062.1	
+18	1063.18	63.77
	1064.94	
	1064.2	
	1066.4	67.32
	1066.89	
	1069.0	
	1068.84	
100	1071.9	
+11	1070.66	
	1074.0	
	1072.22	
101	1075.0	
	1073.54	73.68
102	1075.5	
	1074.60	
	1075.8	75.32
	1075.39	
103	1075.7	
	1075.93	76.15
104	1075.4	
	1076.34	
105	1075.2	
	1076.75	
106	1075.9	
	1077.16	
	1075.6	
	1077.68	
107	1075.8	
	1078.41	
108	1076.1	
	1079.36	
	1076.8	
	1080.53	
	1078.0	
	1081.92	
109	1079.5	
	1083.52	
+59	1081.5	85.54
	1085.23	
109	1083.4	
	1086.94	
	1084.9	
	1088.65	
110	1086.5	
	1090.36	
	1088.6	
	1091.92	
111	1090.7	
	1093.19	
	1092.6	
	1094.17	
112	1094.4	
	1094.85	
	1096.6	
	1095.24	
113	1098.8	
	1095.34	
	1098.0	
	1095.14	95.04
114	1098.4	
	1094.64	

U.S.G.S. DATUM = 1030.00'

+06 +95 +77 +59

8" CRUSHED GRAVEL 8" GRAVEL 8" SAND 12" ADDITIONAL SAND

100.01 +50.02 +00.02 +50.02 +00.06 +50.12 +00.18 +50.22 +42.22 +00.68

AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	13	156

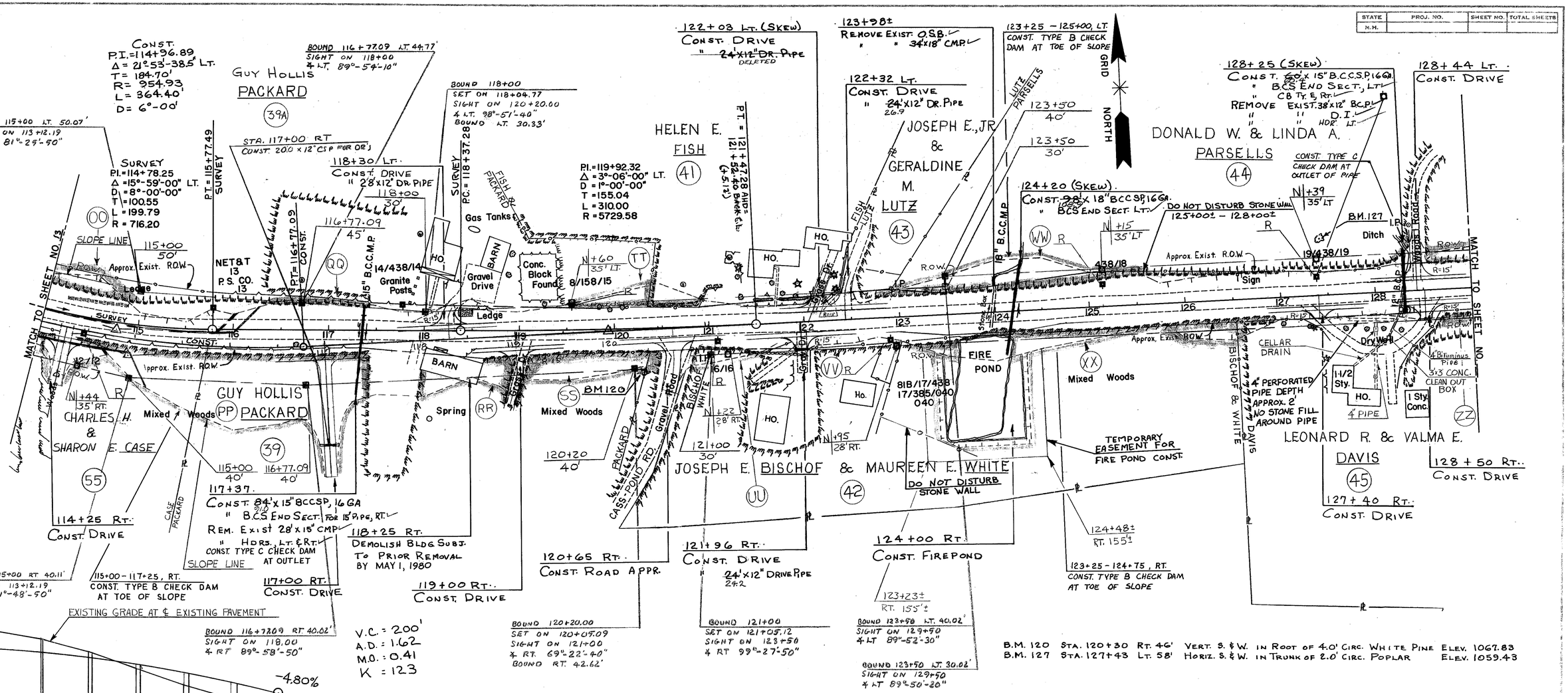
Richmond 5-2562

(USE BOTTOM LINES FIRST)
DESCRIPTION
E.L.W. CHECKED AND VERIFIED BY W.A.P. 5-19-81
NO. | DATE | STATION | STATION | BY | PROPOSAL

NOTE BOOKS
BOOK NO. | PAGE NO.

DATE 27AUG75
10 SEPT 75
S. E. LUDWICK
S. E. LUDWICK
PLAN TRACED
PLAN CHECKED
PROFILE TRACED
PROFILE CHECKED
INKED
CHECKED
DATE

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			



B.M. 120 STA. 120+30 RT. 46' VERT. S. & W. IN ROOT OF 4.0' CIRC. WHITE PINE ELEV. 1067.83
B.M. 127 STA. 127+43 LT. 58' HORIZ. S. & W. IN TRUNK OF 2.0' CIRC. POPLAR ELEV. 1059.43

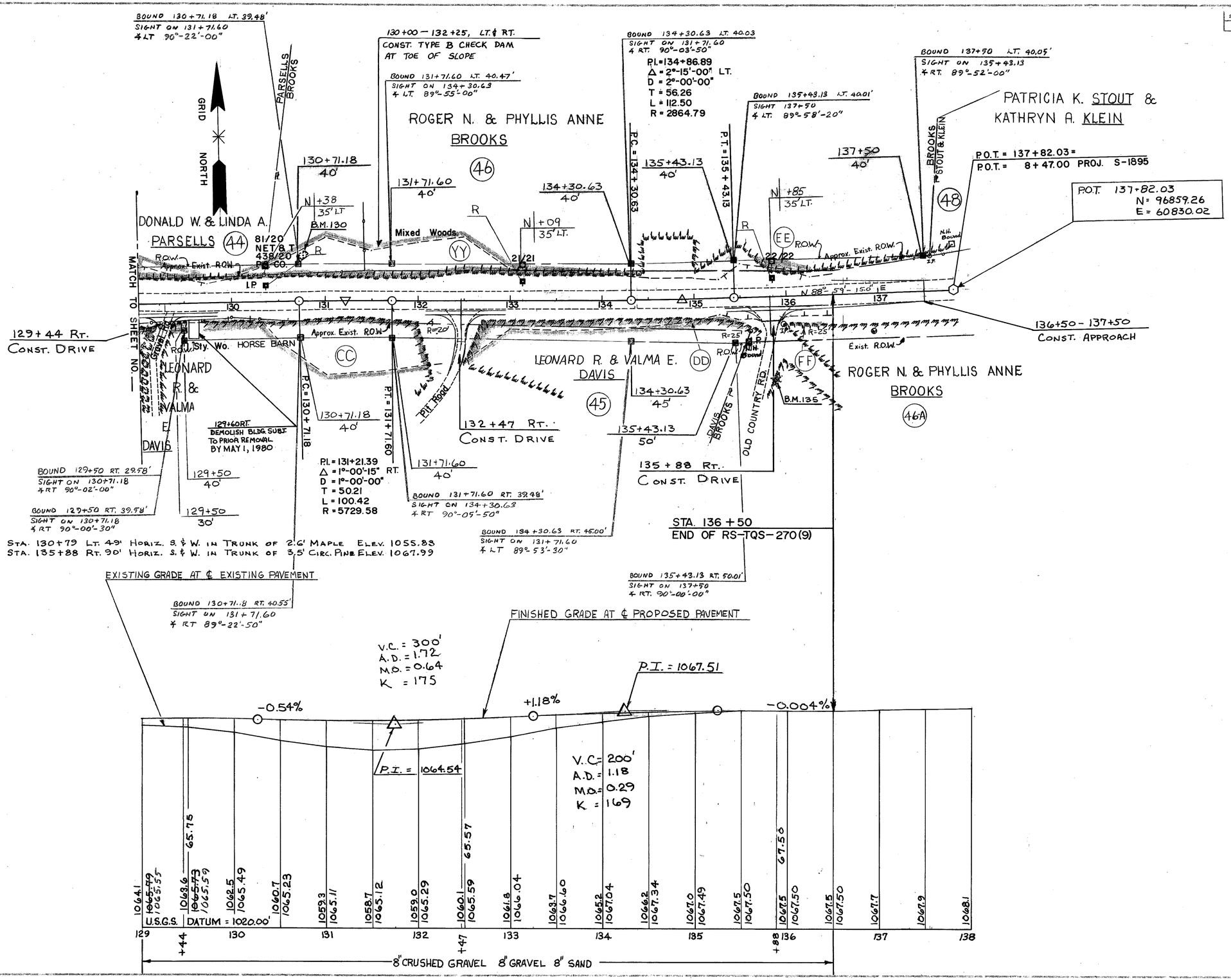
AS BUILT PLANS

PROJ. NO.	SHEET NO.	TOTAL SHEETS
RS-TQS-270(9)	14	156

Richmond 5-2562

D-27AUG75 10SEPT75
S. E. LUDWICK
PLAN TRACED
PLAN CHECKED
PROFILE TRACED S. E. LUDWICK
PROFILE CHECKED
INDEX
CHECKED
DATE
R.O.W. CHECKED AND VERIFIED BY W.O.R. SUR. AZ.
USE BOUNDARY LINES FIRST

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
N.H.			



AS BUILT PLANS

PROJ. NO.	SH. KEY NO.	TOTAL SHEETS
RS-TQS-270(9)	15	156

Richmond 5-2562

PLAN TRACED S.E. LUDWICK DATE 27AUG75
PLAN CHECKED
PROFILE TRACED S.E. LUDWICK 10 SEPT 75
PROFILE CHECKED
INKED
CHECKED
DESCRIPTION