M.A.G. UNIFORM STANDARD DETAILS

NOTE: ALL CONSTRUCTION IS TO CONFORM TO THE LATEST M.A.G. UNIFORM STANDARD DETAILS AND M.A.G. SPECIFICATIONS.

STANDARD DETAILS

101	GENERAL INFORMATION
110	PLANS SYMBOLS
112	DIMENSIONING FOR ROAD IMPROVEMENT PLANS
120-1	SURVEY MARKER
120-2	SURVEY MARKER
130	BARRICADE
131	STREET SIGN BASE
135-1	STEEL GUARD RAIL
135-2	STEEL GUARD RAIL
135-3	STEEL GUARD RAIL
135-4	STEEL GUARD RAIL
150	PRECAST SAFETY CURB
160	6' CHAIN LINK FENCE & GATE
170	TYPICAL RUNWAY OR TAXIWAY LIGHTING DETAIL
190	ROCK CORRECTION PROCEDURE FOR MAXIMUM DENSITY DETERMINATION
200	BACKFILL, PAVEMENT & SURFACE REPLACEMENT
201	PAVEMENT SECTION AT TERMINATION
202	ALLEY DETAILS (PAVED & UNPAVED)
203	SCUPPER
204	EQUIPMENT CROSSING
205	PAVED TURNOUTS
220	CURB & GUTTER-TYPES A,B,C & D
221	CURB & GUTTER (TRANSITION, INTEGRAL & WARNING BEACON)
222	SINGLE CURB-TYPES A,B & TERMINATION
230	SIDEWALKS
	SIDEWALK RAMPS-TYPE A
	SIDEWALK RAMPS-TYPE B
240	VALLEY GUTTER
250	DRIVEWAY ENTRANCES
251	RETURN TYPE DRIVEWAYS
252	PARKING BAYS
260	ALLEY ENTRANCE (WITH COMBINED CURB & GUTTER)
261	ALLEY ENTRANCE (WITH ROLL TYPE CURB & GUTTER)
262	WING TYPE ALLEY ENTRANCE (WITH COMBINED CURB & GUTTER)
263	WING TYPE ALLEY ENTRANCE (WITH ROLL TYPE CURB & GUTTER)
270	FRAME & COVER GRADE ADJUSTMENT

M.A.G. SPECIFICATIONS

SECTION 101 to 109	GENERAL CONDITIONS
SECTION 201	CLEARING AND GRUBBING
SECTION 205 & 301	ROADWAY EXCAVATION AND SUBGRADE PREPARATION
SECTION 321	ASPHALT CONCRETE PAVEMENT
SECTION 322	ASPHALT CONCRETE OVERLAY
SECTION 334	PRESERVATIVE SEAL FOR ASPHALT CONCRETE
SECTION 336	PAVEMENT MATCHING AND SURFACE REPLACEMENT
SECTION 340	CONCRETE CURB, GUTTER, SIDEWALK, DRIVEWAYS AND ALLEY ENTRANCE
SECTION 345	ADJUSTING FRAMES, COVERS AND VALVE BOXES
SECTION 350	REMOVAL OF EXISTING IMPROVEMENTS
SECTION 401	TRAFFIC CONTROL
SECTION 405	MONUMENTS
SECTION 4[illegible]	PRECAST SAFETY CURB
SECTION [illegible]	CONCRETE STRUCTURES
SECTION [illegible]	CORRUGATED METAL PIPE AND ARCHES
SECTION 7[illegible]	BASE MATERIALS
SECTION 710	ASPHALT CONCRETE
SECTION 711	PAVING ASPHALT
SECTION 725	PORTLAND CEMENT CONCRETE
SECTION 735	REINFORCED CONCRETE PIPE
SECTION 736	NON-REINFORCED CONCRETE PIPE
SECTION 765	RUBBER GASKETS FOR CONCRETE PIPE
SECTION 792	DUST PALLIATIVE
SECTION 795	TOPSOIL

GENERAL NOTES

1. All construction to conform to the latest applicable Maricopa Association of Governments Standard Details and Specifications (MAG). City of Phoenix Standard Details will continue to apply where such details were not adopted or included by MAG.
2. Approval by the City Engineer means for general layout in right-of-way.
3. Approval is for nine (9) months time only. If construction work is not started within nine (9) months, the plans shall be resubmitted for approval.
4. The Engineering Department, Inspection Section, shall be notified 24 hours prior to any construction work at telephone 412-7210.
5. Acceptance of the completed right-of-way improvements will not be given until:
   a. Mylar "as-builts" plans have been submitted by a registered professional engineer and approved by the City Engineer when the City Engineer provides inspection. The subdivider's or the developer's registered engineer shall certify that staking was performed under his supervision and the "as-built" elevations and dimensions shown on the plans are correct.
   b. The subdivider's or the developer's registered engineer shall have certified in writing as to the location and accuracy of all survey monuments.
6. All obstructions in the right-of-way will be removed before any construction is permitted.
7. Exact point of pavement matching, termination, and/or overlay, if necessary, shall be determined in the field by the Field Engineering Division.
8. All frames, covers, valve boxes, and manholes shall be adjusted to finished grade upon completion of paving or related construction. Adjustment of existing Type "A" or Type "B" water valve boxes in parkway shall be considered incidental to parkway.
9. Any quantities shown on plans are not verified by the City Engineer.
10. No construction shall start until conflicting underground utility construction is completed and until service stubs to all platted lots have been extended.
11. Approval by the City Engineer is subject to minimum right-of-way width.
12. Grading and Drainage plans approval includes:
    a. Construction of all surface improvements shown on the approved grading and drainage plan, including but not limited to, retention areas and/or other drainage facilities, drainage patterns, walls, curbing, asphalt pavement, and building floor elevations.
13. It shall be the responsibility of the permittee to arrange for the relocation and relocation costs of all utilities and submit a utility relocation schedule prior to the issuance of a construction permit.
14. All underground tanks require a permit from the City Engineer prior to removal.
15. Trees and shrubbery in the right-of-way that conflict with the improvements proposed herein, are not to be removed or relocated without prior approval of the City of Peoria. The permittee shall be responsible for obtaining the necessary authorization to remove and/or relocate said trees or shrubbery.
16. Either dry hydrated lime or Portland cement shall be added to the mineral aggregate as a mineral filler. The amount to be used shall be approximately 1.5 percent, by weight of the mineral aggregate.
17. In all areas where new construction of curb, gutter, sidewalks and driveways is required, and the engineer determines the existing grade to consist of soils with swelling characteristics, the moisture content shall be brought as close as possible to optimum required for compaction by the addition of water, by the addition of blending of dry suitable material or by drying of existing material. The material shall then be compacted to a relative density of seventy-five (75) percent minimum to eighty five (85) percent maximum with eighty (80) percent as ideal.
18. A paving permit is required.
19. Excavating contractor must give location for wasting excess excavation and a letter from the owner giving permission for dumping prior to starting on-site construction.
20. City Engineer's office shall be notified before any on-site construction begins, telephone 412-7210.
21. Staking pad and/or finish floor elevations is the responsibility of the developer and his engineer. In non-critical areas:
    a: Developer's engineer shall submit certification of construction building pad elevations prior to City acceptance of project.

    In critical drainage area:

    a: Substitute building flood elevation in above note. "As-Builts" finish floor elevations will be submitted by developer's engineer.
22. A separate permit is needed for any off-site construction.
23. A grading and drainage plan shall be on the job site at all times. Deviation from the plan must be preceded by an approved plan revision.
24. Contractor shall provide level bottom in all retention basins at elevations as shown on the plans. Retention basin side slopes shall not exceed 2:1 on private property and 4:1 in public rights-of-way unless noted otherwise on the plans.
25. All drainage protective devices such as swales, interception ditches, pipes, protective berms, concrete channels or other measures designed to protect homes from storm runoff must be constructed prior to the construction of any houses.

STAKING SPECIFICATION

PREGRADE STAKING:

STREETS - [illegible] AT TWO-FOOT OFF-SET TO THE BACK OF SIDEWALK (BACK OF- [illegible]

PADS - IN THE CASE OF ADJACENT PADS BEING GREATER THAN 0.5 FEET DIFFERENCE IN ELEVATION, BOTH GRADES WILL BE PROVIDED. IF ADJACENT PADS ARE 0.5 FEET OR LESS DIFFERENCE IN ELEVATION, [illegible] WILL BE PROVIDED.

PAD BLUETOPS - A STAKE WILL BE PROVIDED NEAR THE CENTER OF THE PAD AT THE FINISHED PAD GRADE ("BULLET"). IF THE COMPACTED PAD IS 0.4 FOOT OR HIGHER THAN GRADE, A CUT STAKE TO THE NEAREST ONE-HALF FOOT WILL BE SET.

PHASE I.

AS-BUILT CERTIFICATION

This paving project has been constructed in accordance with the approved plans. The "AS-BUILT" alignment and grade elevations are in essential conformity with approved plans. I certify that the survey monuments on the plans have been checked for accuracy.

(Seal: JAMES A. BROWN) [signature] 9/29/93

Registered Professional Engineer — Date

PHASE II & III

AS-BUILT CERTIFICATION

This paving project has been constructed in accordance with the approved plans. The "AS-BUILT" alignment and grade elevations are in essential conformity with approved plans. I certify that the survey monuments on the plans have been checked for accuracy.

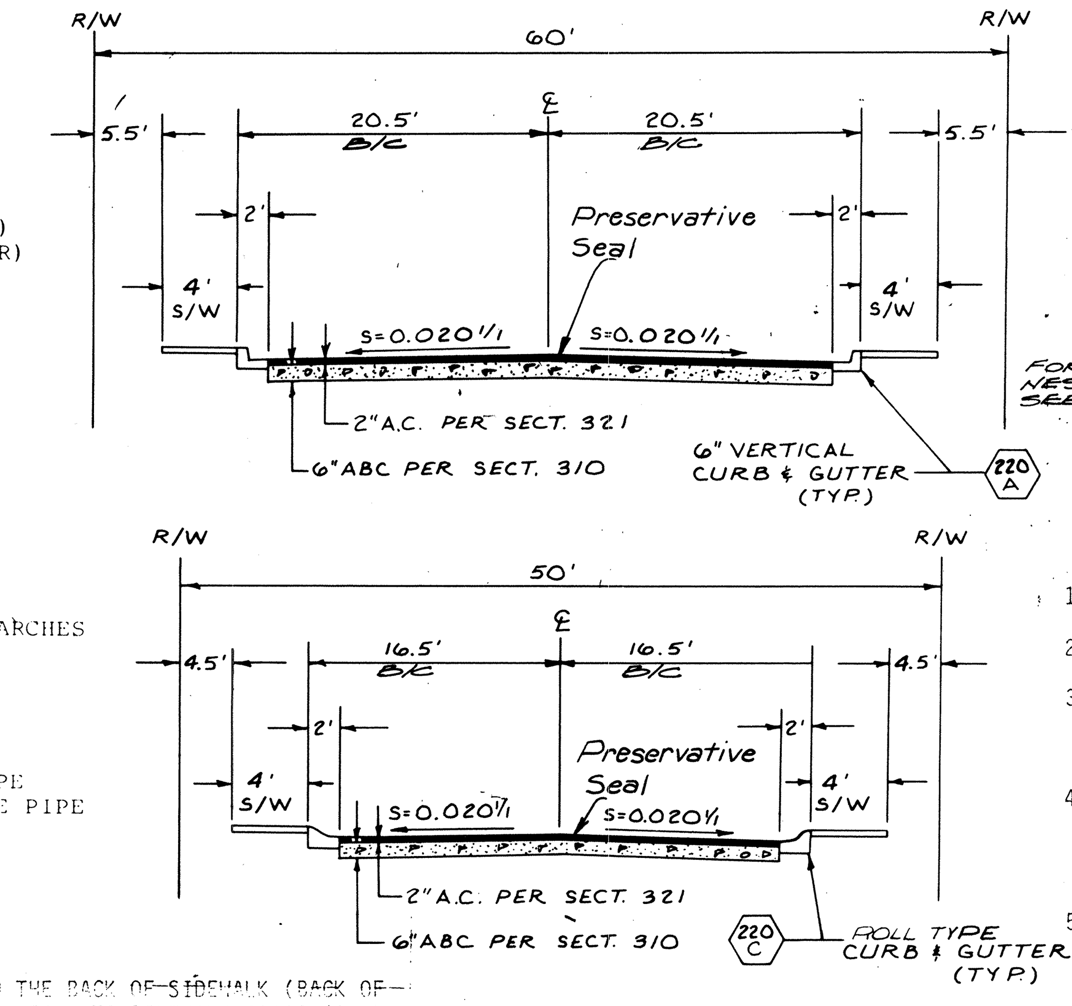
(Seal: Registered Professional Engineer (Civil) CERTIFICATE NO. 11292 JAMES A. BROWN ARIZONA) [signature] 7-13-94

Registered Professional Engineer — *Date*

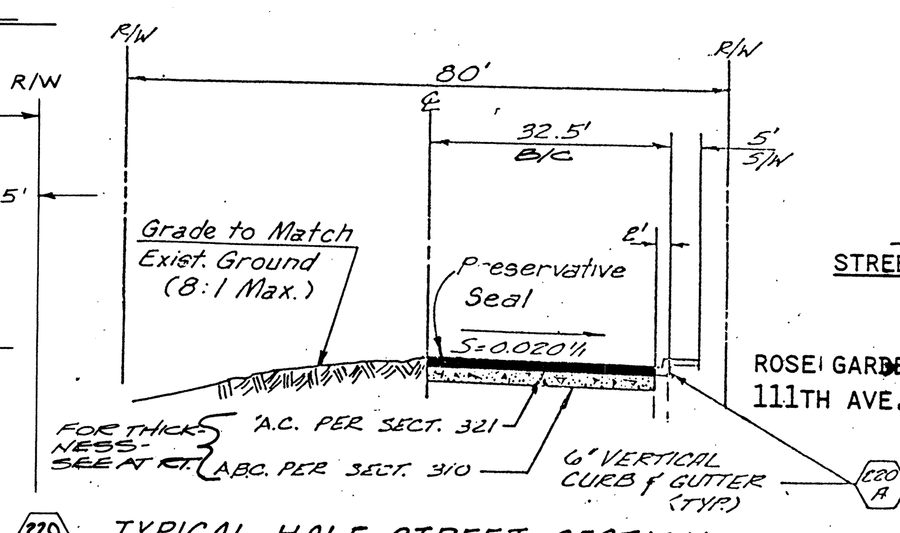
Two working days before you dig. CALL FOR THE BLUE STAKES 263-1100 Blue Stake Center CALL COLLECT

TYPICAL STREET SECTIONS

NOTE: ADDITIONAL STREET SECTION SHOWN ON SHEETS 2, 3, & 8 OF 8



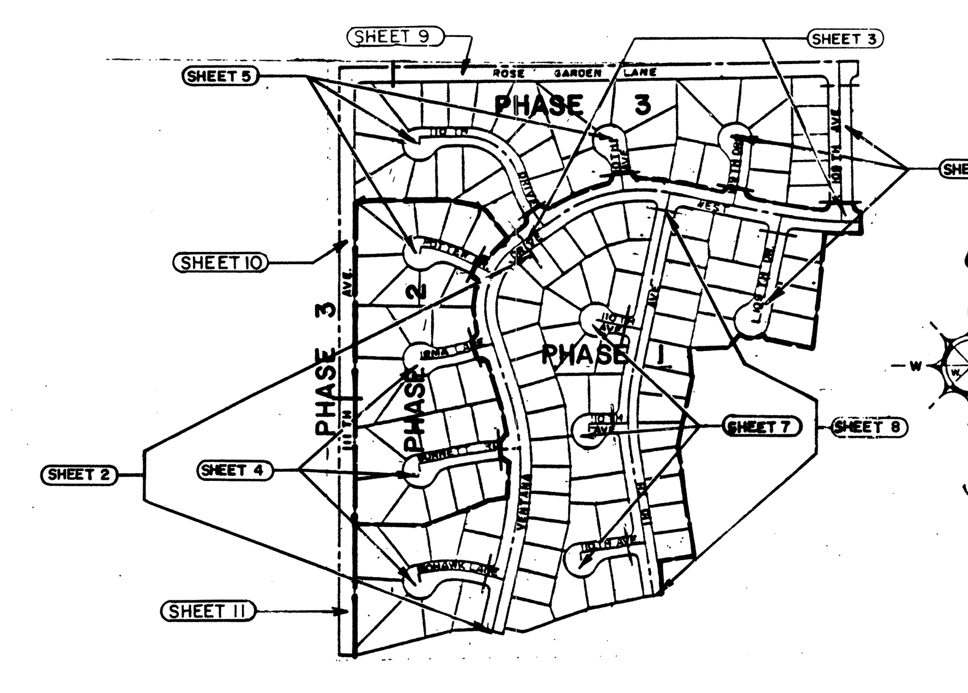
ROSE GARDEN & 111 AVE. (TYP.)



TYPICAL HALF STREET SECTION

SPECIAL NOTES

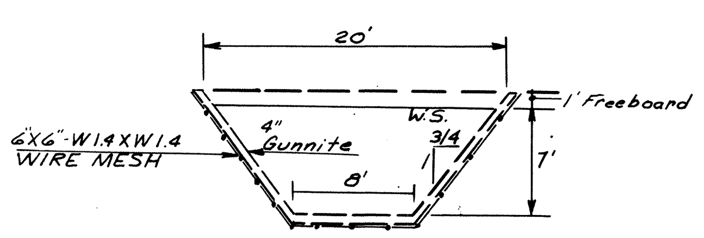
1. THE CONTRACTOR SHALL NOTIFY THE DEVELOPER AT LEAST 48 HOURS IN ADVANCE FOR ANY STAKING OR RESTAKING REQUIRED.
2. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PERMITS REQUIRED AT HIS OWN EXPENSE.
3. THE CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT THE REVISION OF THESE PLANS IF NECESSARY DUE TO A CONFLICT BETWEEN A FACILITY PROPOSED HEREIN AND AN EXISTING FACILITY.
4. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY THE PRESENCE AND LOCATION OF ANY AND ALL EXISTING OVERHEAD AND/OR UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THIS CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT, AND TO ADEQUATELY PROTECT AND MAINTAIN ANY SUCH UTILITIES.
5. THE ENGINEER DOES NOT ASSUME ANY LIABILITY FOR ERRORS OR LINE AND/OR OF GRADE ON ANY STAKING WHICH HAS BEEN DISTURBED IN ANY WAY, NOR DOES THE ENGINEER ASSUME ANY LIABILITY FOR ERRORS OF LINE AND/OR GRADE ON ANY STAKING THAT HAS BEEN IN PLACE [illegible] (24) HOURS OR MORE WITHOUT THE COMMENCEMENT OF THE [illegible] AS SET. [illegible] CONSTRUCTION OPERATIONS, HEAVY EQUIPMENT MAY CROSS [illegible]. IF THIS IS THE CASE, AN EARTH FILL SHOULD BE [illegible] EE FEET ABOVE PIPE. THE FILL SHOULD BE SUFFICIENT TO [illegible] EMENT OF THE PIPE.



SHEET INDEX MAP

NO-SCALE

DRAINAGE CHANNEL SECTION



A-A

"FOR UPDATE APPROVAL ONLY"

REGISTERED CIVIL ENGINEER — 2-06-92 DATE

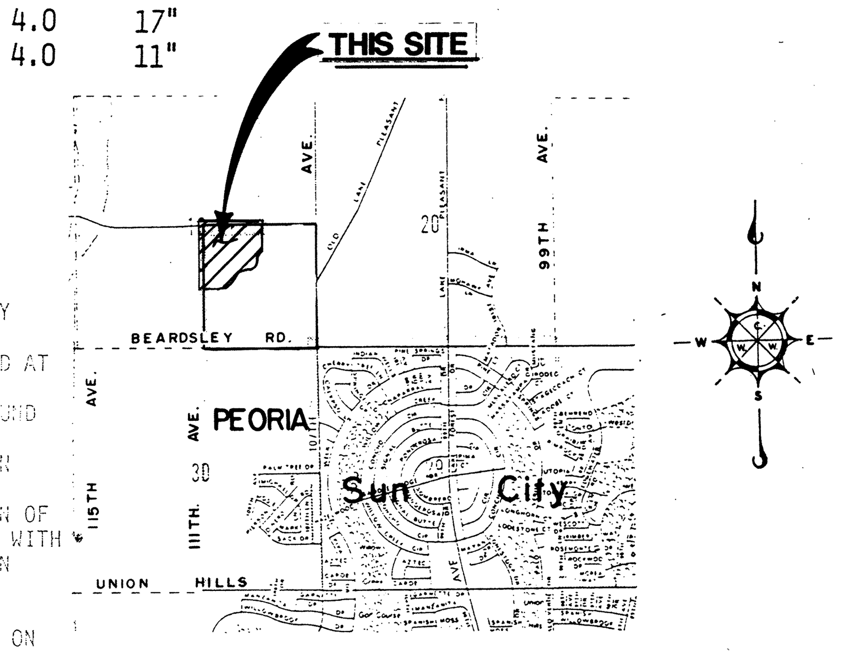
UPDATE APPROVED BY:

PHASE 1	[signature] CITY ENGINEER	12/1/92 DATE
PHASE 2	CITY ENGINEER	DATE
PHASE 3	CITY ENGINEER	DATE

VENTANA LAKES UNIT 9 PAVING PLANS

CITY OF PEORIA

STREET	THICKNESS (INCHES) AC	ABC	SELECT
ROSE GARDEN LN.	4.0	4.0	17"
111TH AVE.	4.0	4.0	11"



VICINITY MAP

NO SCALE

APPROXIMATE QUANTITIES

FOR ESTIMATING ONLY. ENGINEER MAKES NO GUARANTEE OF ACCURACY

ITEM NO.	DESCRIPTION	UNIT	PHASE 1	PHASE 2	PHASE 3
1	3" A.C. OVER 9" A.B.C.	S.Y.	--	--	9,647
2	2" A.C. OVER 6" A.B.C.	S.Y.	17,627	3,026	4,612
3	VERTICAL CURB & GUTTER, M.A.G DETAIL 220-A	L.F.	4,034	--	3,743
4	ROLL CURB & GUTTER, M.A.G DETAIL 220-C	L.F.	3,870	1,562	1,698
5	RIBBON CURB, M.A.G DETAIL 220-B	L.F.	45	--	60
6	CURB TRANSITION, M.A.G DETAIL 221	EA.	18	6	6
7	CONCRETE SIDEWALK, M.A.G DETAIL 230	S.F.	29,925	6,444	9,560
8	S.W. RAMP M.A.G DETAIL 231	EA.	20	--	2
9	D/W ENTRANCE, M.A.G DETAIL 250	S.F.	2015	--	485
10	CONCRETE APRON, M.A.G DETAIL 240	EA.	--	--	2
11	3' WIDE CONCRETE VALLEY GUTTER M.A.G DETAIL 240	L.F.	--	--	37
12	SURVEY MARKER, M.A.G DETAIL 120-1-B	EA.	34	8	13
13	STREET SIGN BASE, M.A.G DETAIL 131-B	EA.	13	--	1
14	MANHOLE COVER FRAME ADJUST., M.A.G DETAIL 422	EA	19	3	6
15	W.V. & C.O. FRAME ADJUST., M.A.G DETAIL 270	EA.	32	--	4
16	9 BALL DELINEATOR, CITY OF PHOENIX DETAIL P-1023	EA.	25	--	7
17	GROUTED RIP-RAP	S.Y.	--	--	28
18	BARRICADE REMOVAL	L.F.	62	--	--
19	REMOVE 9 BALL DELINEATOR	EA.	--	4	18
20	REMOVE EXISTING A.C. PAVEMENT	S.Y.	--	--	3,034
21	DOUBLE 8' x 4' C.B.C., ADOT DETAIL B-02.20	L.F.	--	--	72
22	4'-6" WINGWALLS, ADOT DETAIL B-08.10 MOD.	EA.	--	--	4

SUBMITTED BY: ______ REGISTERED CIVIL ENGINEER — *October 23, 1985* DATE

APPROVALS

APPROVED [illegible]

UTILITY BLOCK

AGENCY	REPRESENTATIVE	SUBMITTAL DATE
EL PASO NATURAL GAS:	JERRY F. SAVAGE	OCT. 22, 1985; JAN. 31, '92
ARIZONA PUBLIC SERVICE:	STEVE GOODMAN	OCT. 22, 1985; JAN. 31, '92
U. S. WEST:	ROBERT ALEX	OCT. 22, 1985; JAN. 31, '92
SOUTHWEST GAS:	TERRY HUGHES	OCT. 22, 1985; JAN. 31, '92

LEGEND

- SURVEY MONUMENT
- EXISTING ASPHALT PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- STANDARD DETAIL NUMBER
- PROPOSED STOP SIGN
- DETAIL 231-1
- PROPOSED STREET SIGN

DEVELOPER

LENNAR COMMUNITY DEVELOPMENT, INC.
1610 W. CAMELBACK RD.
PHOENIX, ARIZONA 85015
(602) 264-9511

BENCH MARK

CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107TH AVE. & BEARDSLEY RD. INTERSECTION. ELEV. 1240.43

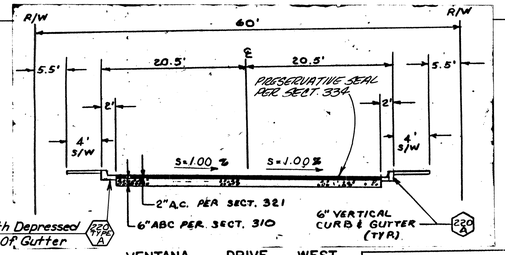
DATE	REVISION	APPROVAL	DATE
2/19/87	LOWER GRADES TO OBTAIN EARTH BALANCE		
1/30/92	PHASING OF PLANS		

RICK ENGINEERING COMPANY
FORMERLY COLLAR, WILLIAMS & WHITE ENGR., INC.
2702 NORTH 44th STREET
SUITE 100A
PHOENIX, ARIZONA 85008
FAX No. (602) 956-5488
(602) 957-3350

840935-1[illegible]

CURVE DATA				
NO.	RADIUS	DELTA	LENGTH	TAN.
①	20.00	90°00'00"	31.42	20.00
②	1079.50	11°57'58"	225.45	113.14
③	20.00	94°21'35"	32.94	21.58
④	20.00	93°09'37"	32.52	21.13
⑤	579.50	09°26'10"	95.44	47.83
⑥	20.00	88°58'26"	31.06	19.65
⑦	230.50	33°59'48"	136.77	70.46
⑧	20.00	81°37'18"	28.49	17.27
⑨	230.50	19°47'48"	79.64	40.22
⑩	189.50	71°34'34"	236.73	136.61
⑪	620.50	18°48'58"	203.77	102.81
⑫	1120.50	11°57'58"	234.01	117.43

AT BACK OF CURB



VENTANA DRIVE WEST
(TYPICAL SECTION)

BENCHMARK
CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107TH AVE. & BEARDSLEY RD. INTERSECTION.
ELEV. 1240.43

Collar, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
7721 NORTH 76TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE 945-3452

JOB NO 840905-16

PAVING PLANS – VENTANA LAKES UNIT 9 SHEET 2 OF 11

CURVE DATA

NO.	RADIUS	DELTA	LENGTH	TAN.
(1)	20.00	88°06'08"	30.75	19.35
(2)	20.00	92°27'56"	32.28	20.88
(3)	395.50	23°45'57"	164.05	83.22
(4)	20.00	84°57'37"	29.66	18.31
(5)	395.50	13°57'10"	96.31	48.40
(6)	20.00	90°43'27"	31.67	20.25
(7)	20.00	89°20'04"	31.18	19.77
(8)	979.50	07°34'30"	129.50	64.82
(9)	20.00	94°57'09"	33.15	21.81
(10)	20.00	90°28'56"	31.58	20.17
(11)	1080.50	09°52'47"	175.97	88.20
(12)	20.00	86°47'27"	30.30	18.91
(13)	20.00	90°00'00"	31.42	20.00
(14)	20.00	96°15'52"	33.60	22.32
(15)	354.00	21°32'01"	256.98	134.43

AT BACK OF CURB

PHASE 1
Install 4-9 ball delineators at equal spacing, f.c. to f.c. Phoenix Det. P-1023

PHASE 1
Install 4-9 ball delineators at equal spacing, f.c. to f.c. Phoenix Det. P-1023

PHASE 1
Install 4-9 ball delineators at equal spacing, f.c. to f.c. Phoenix Det. P-1023

BENCHMARK
CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107 TH AVE. & BEARDSLEY RD. INTERSECTION.
ELEV. 1240.43

Collar, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
2923 NORTH 70TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE 945-3420

JOB NO. 840905-16

CURVE TABLE

STA. TO STA.	RADIUS	ARC	DELTA	TANGENT
31+19.20 to 34+88.60	1,000.00'	369.40	21° 09' 55"	186.83'

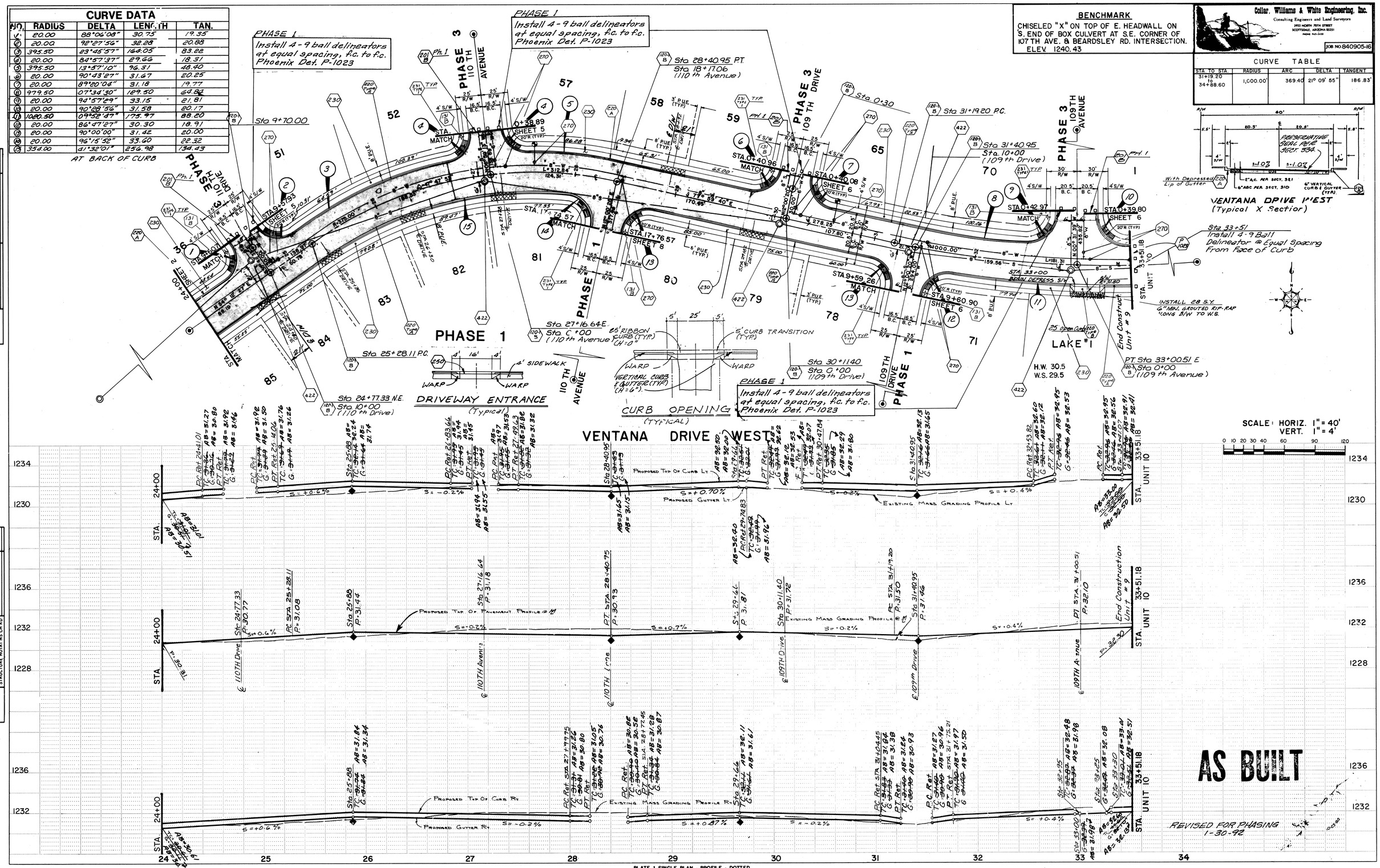


PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

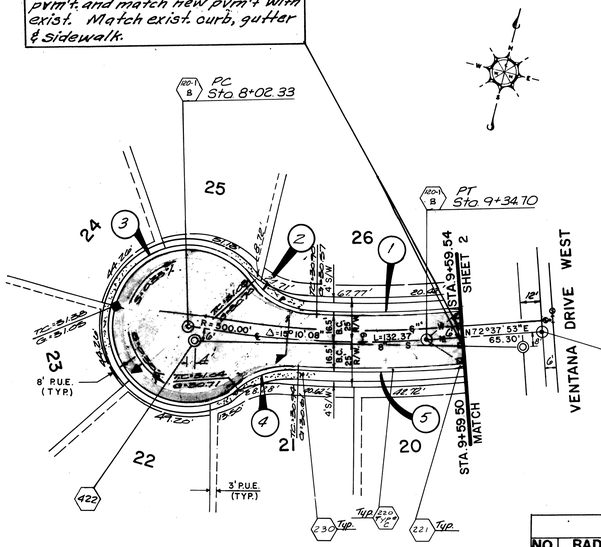
PAVING PLANS - VENTANA LAKES UNIT 9 SHEET 3 OF 11

BENCHMARK
CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107TH AVE. & BEARDSLEY RD. INTERSECTION.
ELEV. 1240.43

Collar, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
2922 NORTH 70TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE: 947-3430

JOB NO 840905-16

Remove exist. delineators (4). Sawcut & Remove 2' min. of exist. pvm't. and match new pvm't with exist. Match exist. curb, gutter & sidewalk.

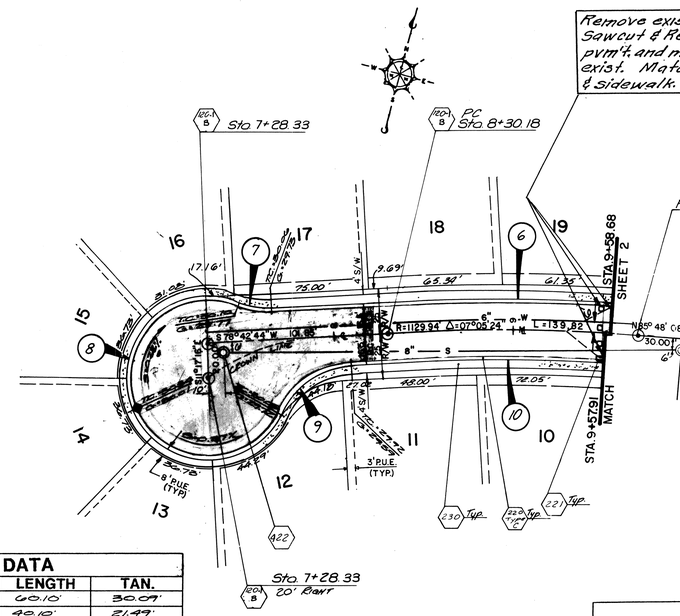


PHASE 2

CURVE DATA				
NO.	RADIUS	DELTA	LENGTH	TAN.
1	483.50	07°07'19"	60.10'	30.09'
2	45.00'	51°05'03"	40.10'	21.49'
3	45.00'	273°33'26"	214.86'	-
4	45.00'	43°26'36"	34.12'	17.93'
5	516.50	08°08'32"	72.08'	36.38'
6	1146.48	06°30'57"	130.38	65.26
7	45.00'	25°06'06"	19.71'	10.02'
8	45.00'	267°35'35"	210.21'	-
9	45.00'	62°32'28"	49.12'	27.33'
10	1113.44	06°28'37"	125.87	63.00

AT BACK OF CURB

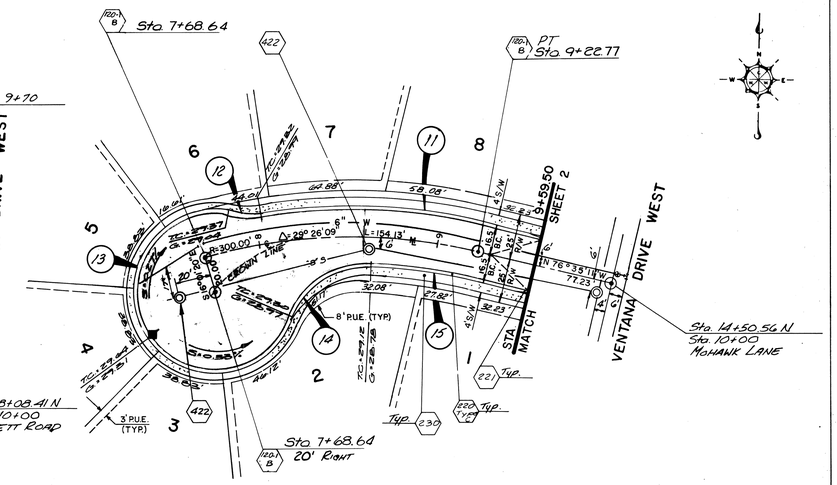
Remove exist. delineators (4). Sawcut & Remove 2' min. of exist. pvm't. and match new pvm't with exist. Match exist. curb, gutter & sidewalk.



PHASE 2

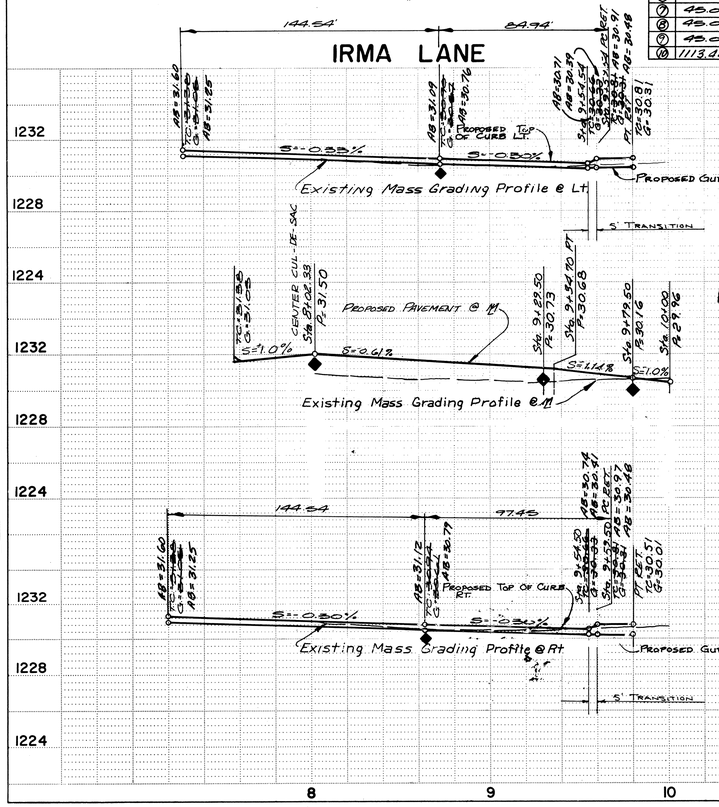
CURVE DATA				
NO.	RADIUS	DELTA	LENGTH	TAN.
1	316.50	22°33'21"	124.60'	63.12'
2	45.00'	21°52'52"	17.18'	8.70'
3	45.00'	262°46'14"	206.38'	-
4	45.00'	71°47'13"	56.38'	32.57'
5	283.50	11°39'29"	57.68'	28.94'

AT BACK OF CURB

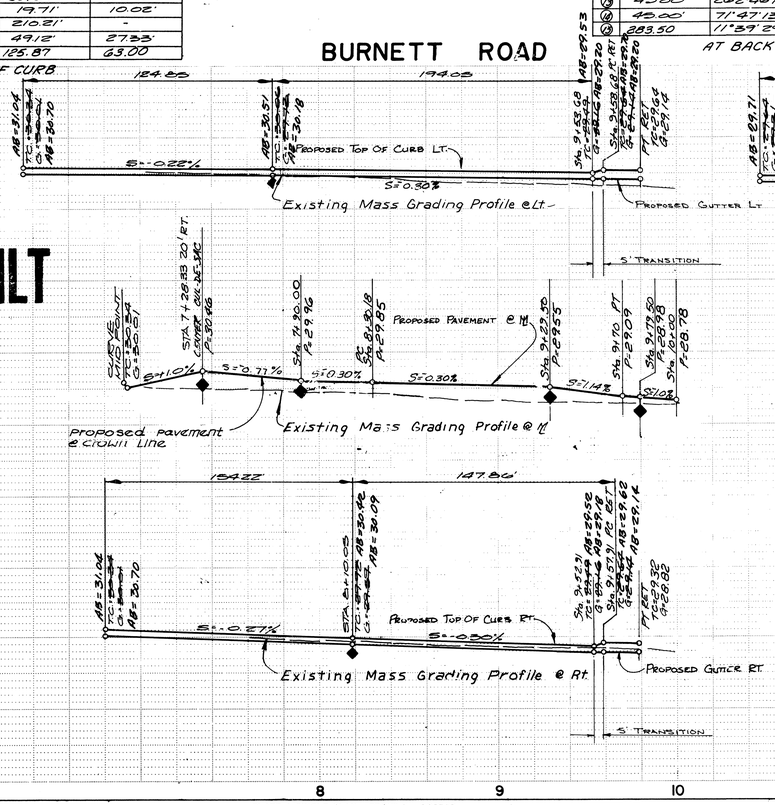


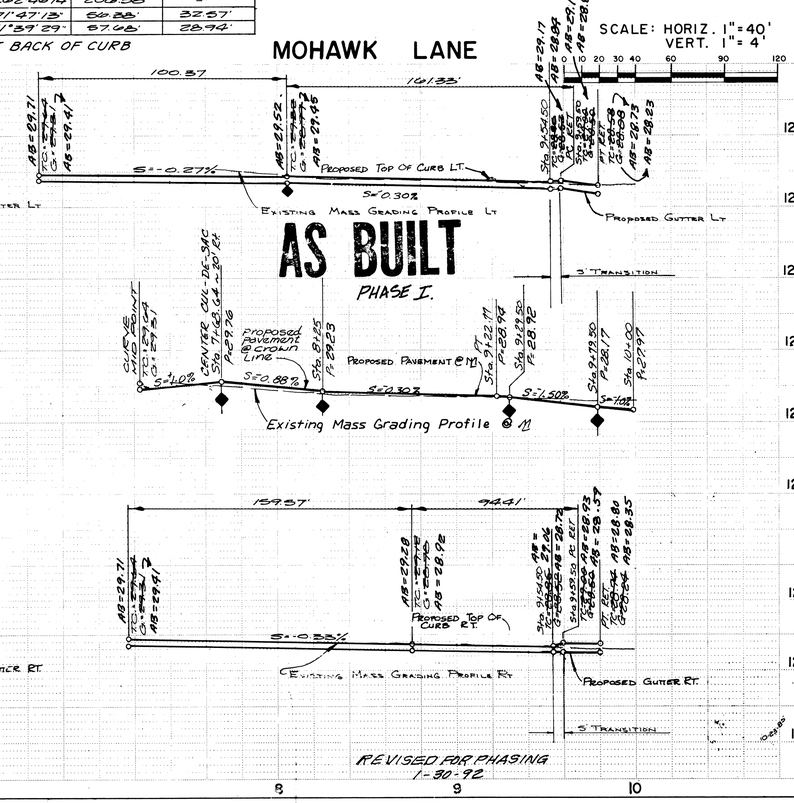
PHASE 1

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



PHASE II
AS BUILT





AS BUILT
PHASE I.

REVISED FOR PHASING
1-30-92

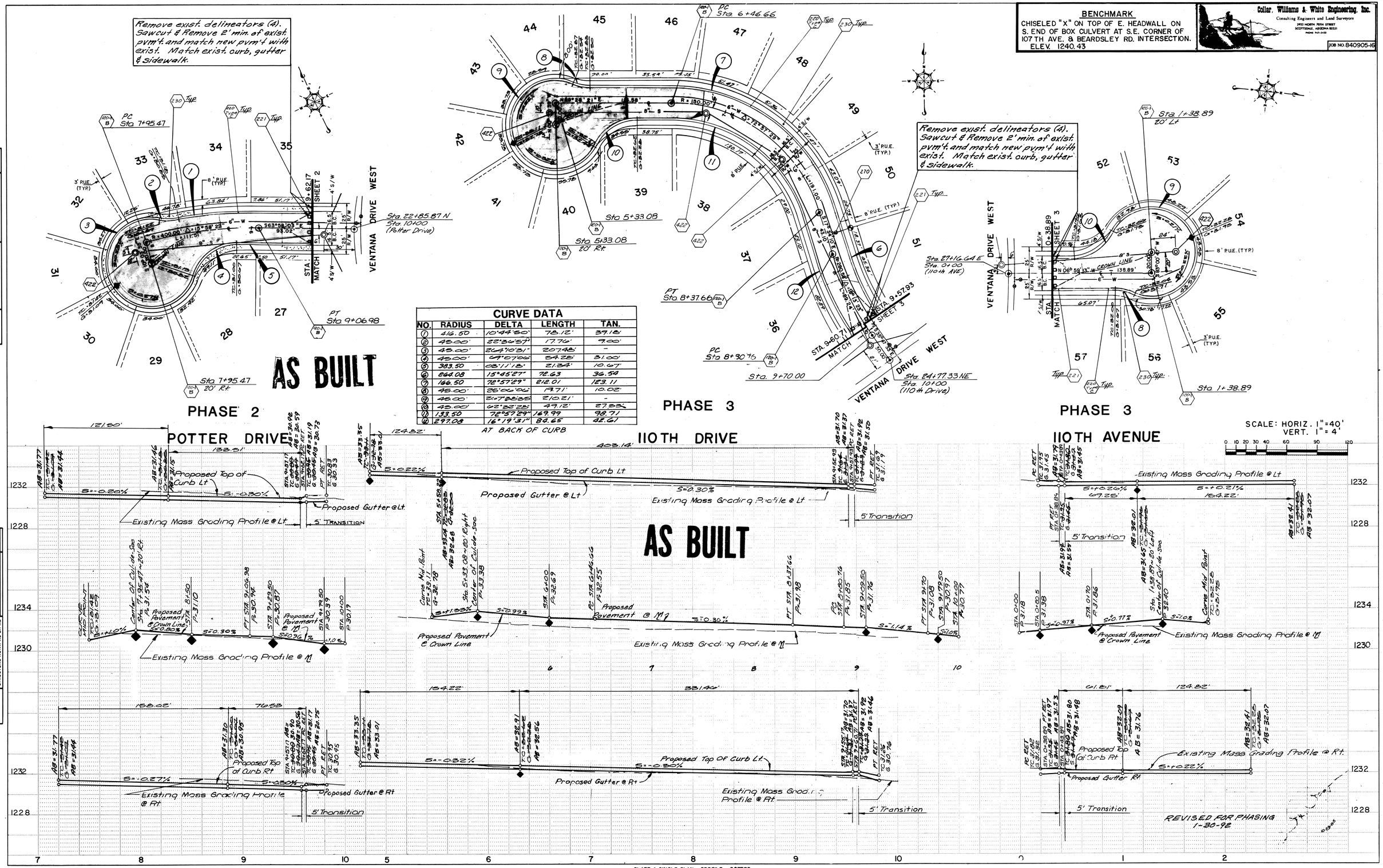
PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

PAVING PLANS - VENTANA LAKES UNIT 9 SHEET 4 OF 11

BENCHMARK
CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107TH AVE. & BEARDSLEY RD. INTERSECTION.
ELEV. 1240.43

Collar, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
2922 NORTH 70TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE 945-3455

JOB NO. 840905-16



CURVE DATA				
NO.	RADIUS	DELTA	LENGTH	TAN.
1	416.50	10°44'50"	78.12'	39.18'
2	45.00'	22°36'57"	17.76'	9.00'
3	45.00'	264°10'31"	207.48'	-
4	45.00'	69°07'06"	54.28'	31.00'
5	383.50	03°11'18"	21.34'	10.67'
6	264.08	15°45'27"	72.63	36.54
7	166.50	72°57'29"	212.01	123.11
8	45.00'	25°06'06"	19.71'	10.02'
9	45.00'	267°38'35"	210.21'	-
10	45.00'	62°32'28"	49.12'	27.35'
11	133.50	72°57'29"	169.99	98.71
12	297.08	16°19'31"	84.65	42.61

AT BACK OF CURB

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NOTE BOOK NO., BY, DATE

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B. M. NOTED, STRUCTURE NOTATNS CH'KD, NOTE BOOK NO., BY, DATE

PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

PAVING PLANS - VENTANA LAKES UNIT 9 SHEET 5 OF 11

BENCHMARK
CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107TH AVE. & BEARDSLEY RD. INTERSECTION.
ELEV. 1240.43

Collar, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
2122 NORTH 75TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE: 945-3132

JOB NO. 840905-16

CURVE DATA				
NO.	RADIJS	DELTA	LENGTH	TAN.
①	850.92	03°46'32"	56.07'	28.05'
②	45.00'	63°47'54"	50.11'	28.01'
③	45.00'	267°27'37"	210.06'	-
④	45.00'	25°06'02"	19.71'	10.02'
⑤	883.92	05°16'26"	81.36	40.71'
⑥	45.00'	62°52'28"	49.12'	27.33'
⑦	45.00'	267°28'36"	210.21'	-
⑧	45.00'	25°06'02"	19.71'	10.02'

AT BACK OF CURB

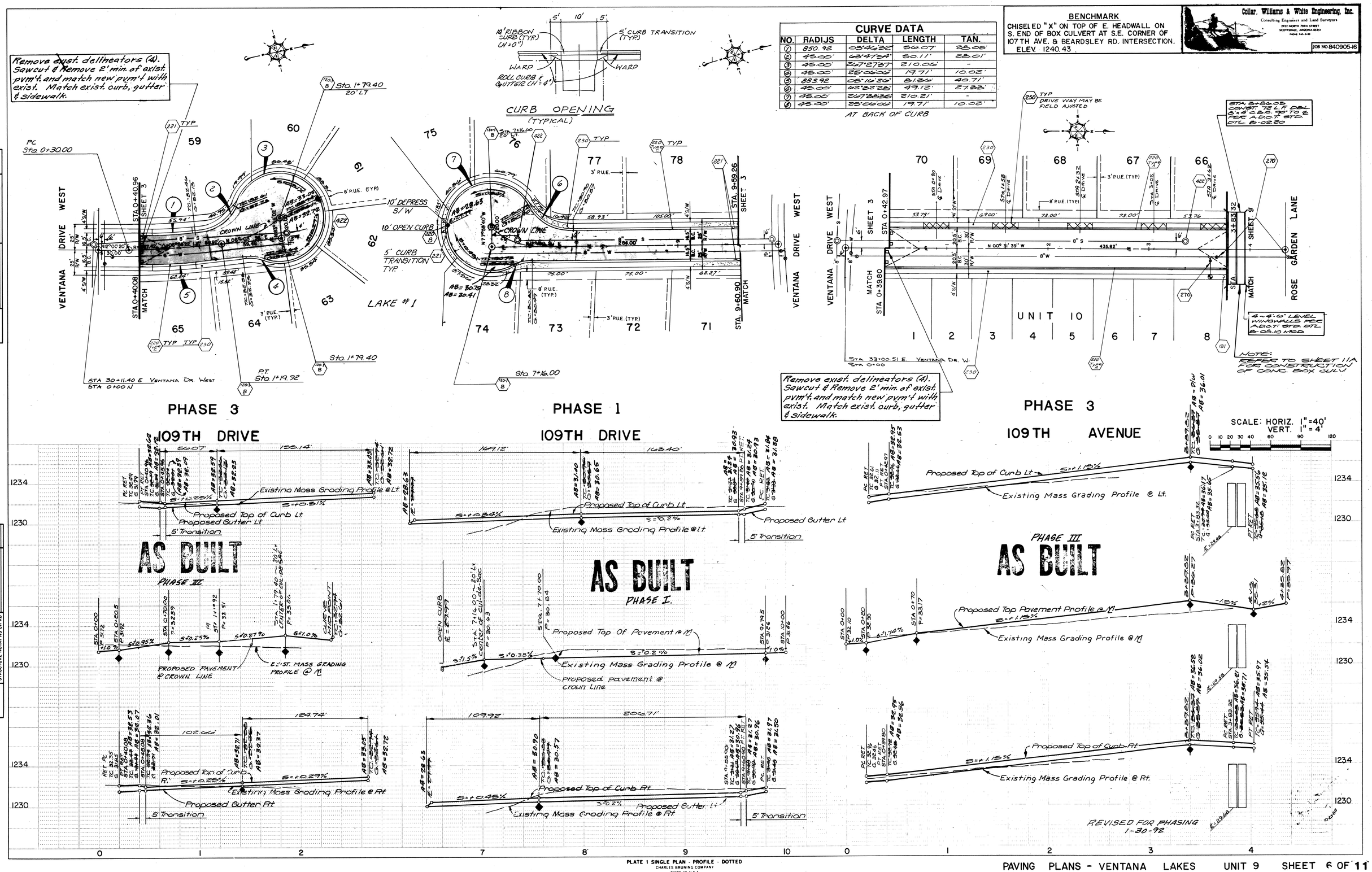


PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

PAVING PLANS - VENTANA LAKES UNIT 9 SHEET 6 OF 11

BENCHMARK

CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107TH AVE. & BEARDSLEY RD. INTERSECTION. ELEV. 1240.43

Collar, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
2922 NORTH 70TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE 947-3433

JOB NO 840905-16

CURVE DATA

NO.	RADIUS	DELTA	LENGTH	TAN.
1	45.00'	25°06'06"	19.71'	10.02'
2	45.00'	267°38'35"	210.21'	-
3	45.00'	62°32'28"	49.12'	27.33'
4	45.00'	46°53'43"	36.83'	19.52'
5	45.00'	273°47'26"	215.03'	-
6	45.00'	56°27'33"	44.34'	24.16'

AT BACK OF CURB

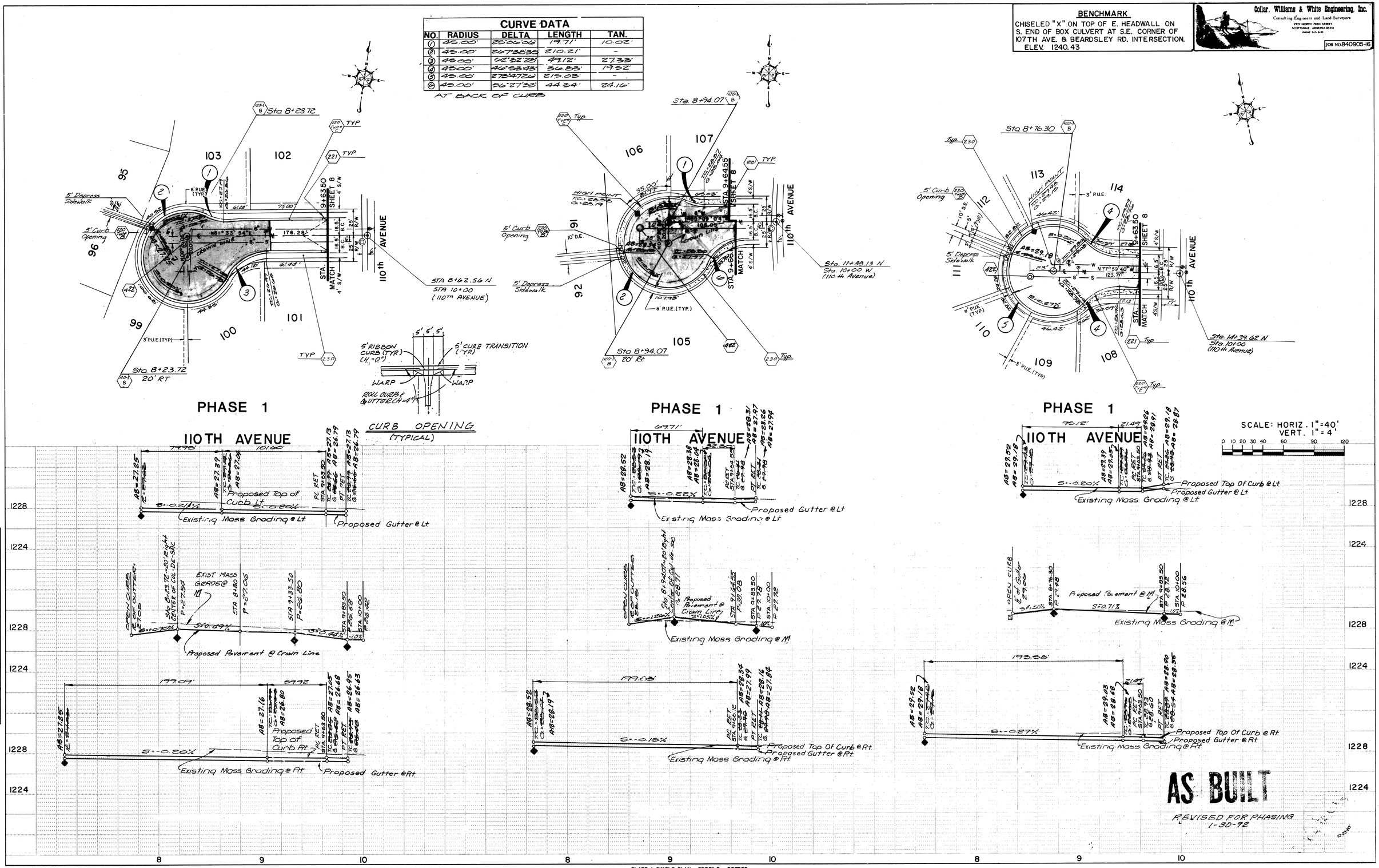


PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

PAVING PLANS - VENTANA LAKES UNIT 9 SHEET 7 OF 11

CURVE DATA			
NO.	RADIUS	DELTA	LENGTH	TAN.
1	20.00	90°00'00"	31.42	20.00
2	616.50	04°26'27"	47.78	23.90
3	18.33	77°14'07"	24.74	14.67
4	20.00	86°42'45"	30.27	18.88
5	616.50	09°34'02"	102.94	51.59
6	583.50	20°26'27"	208.17	105.20

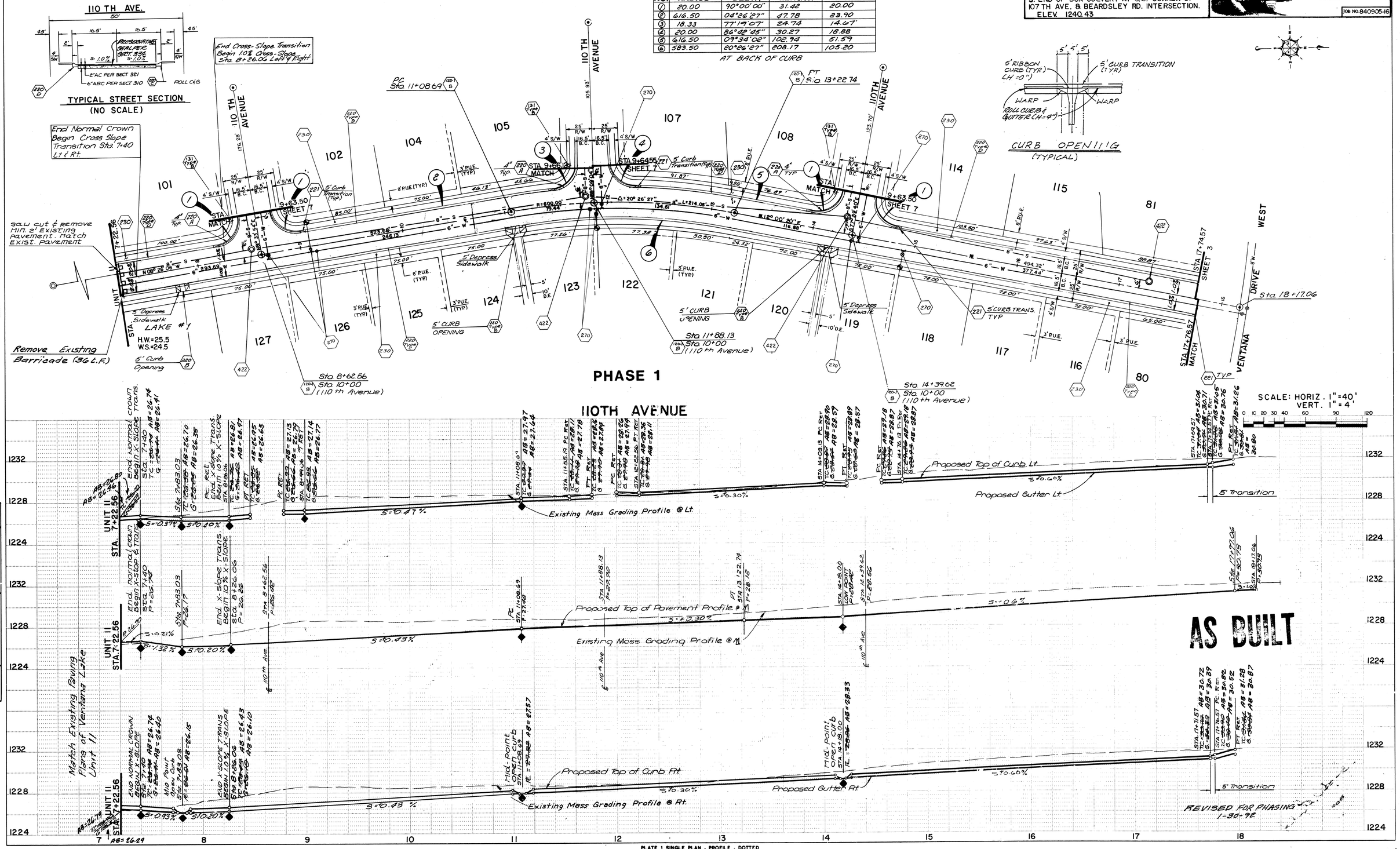
AT BACK OF CURB

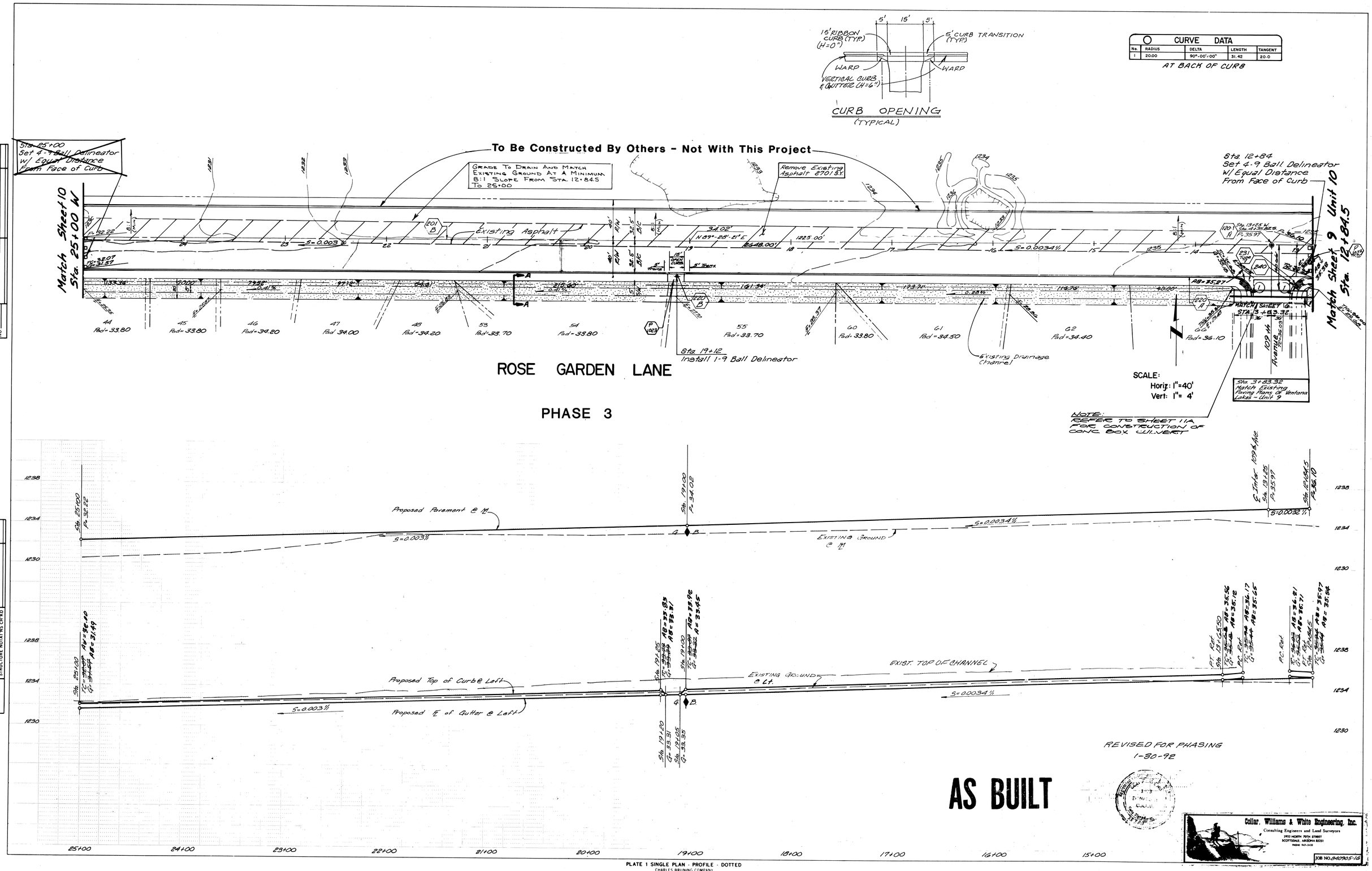
BENCHMARK

CHISELED "X" ON TOP OF E. HEADWALL ON S. END OF BOX CULVERT AT S.E. CORNER OF 107 TH AVE. & BEARDSLEY RD. INTERSECTION.
ELEV. 1240.43

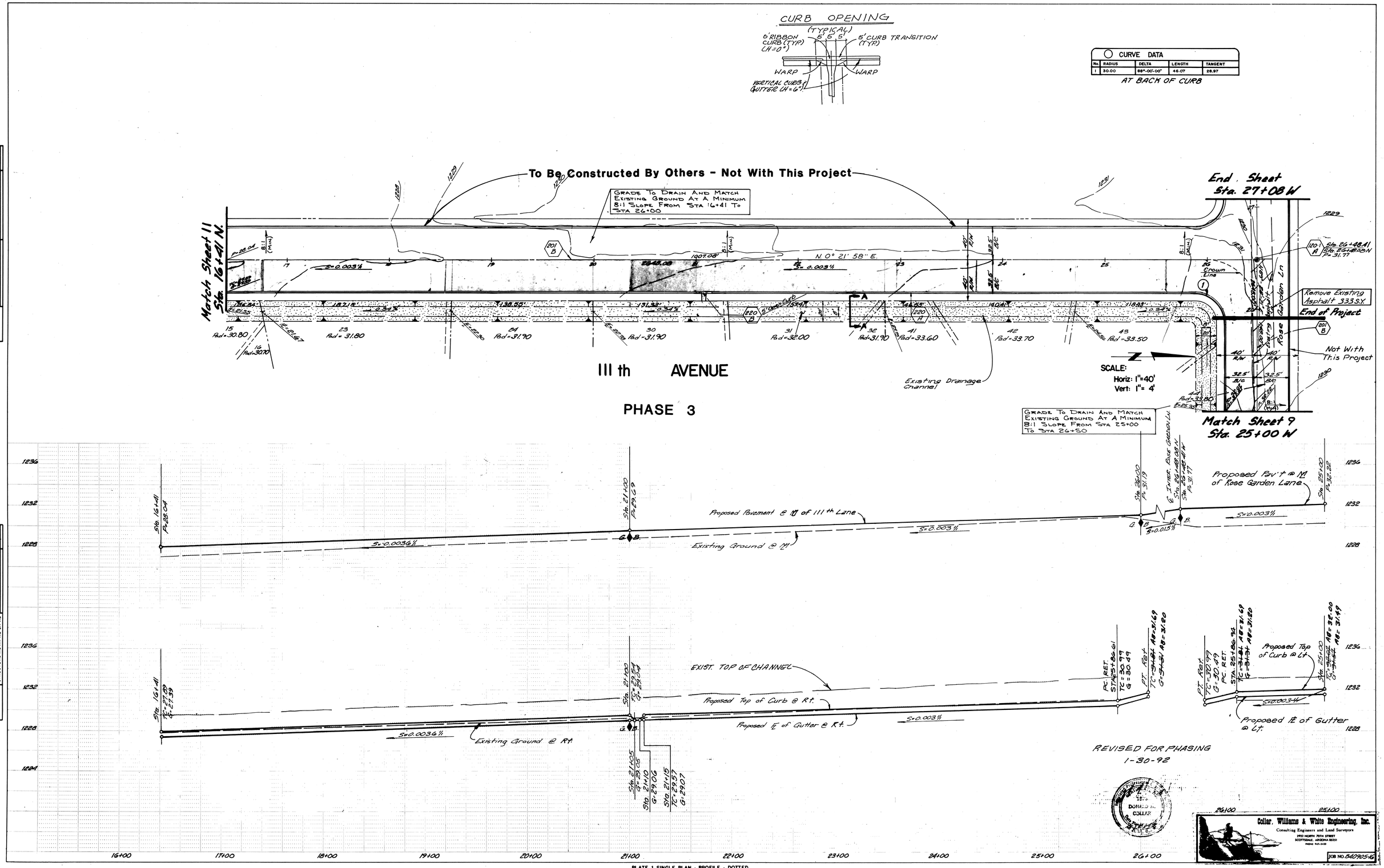
Coller, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
2920 NORTH 70TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE: 945-3135

JOB NO. 840905-16

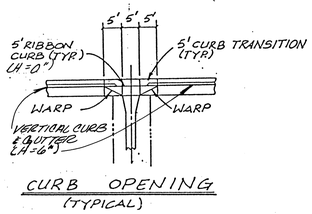


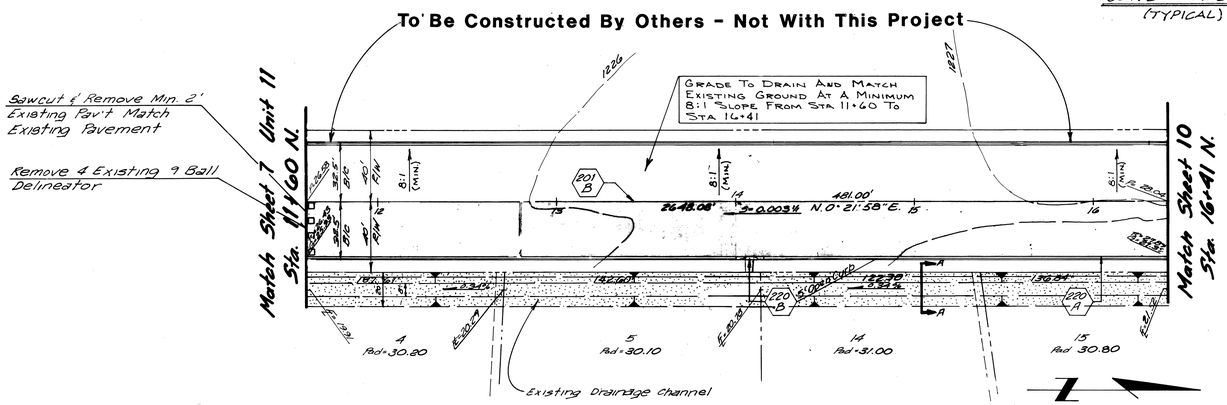


PAVING PLAN VENTANA LAKES UNIT 9 SHEET 9 OF 11



PAVING PLAN VENTANA LAKES UNIT 9 SHEET 10 OF 11

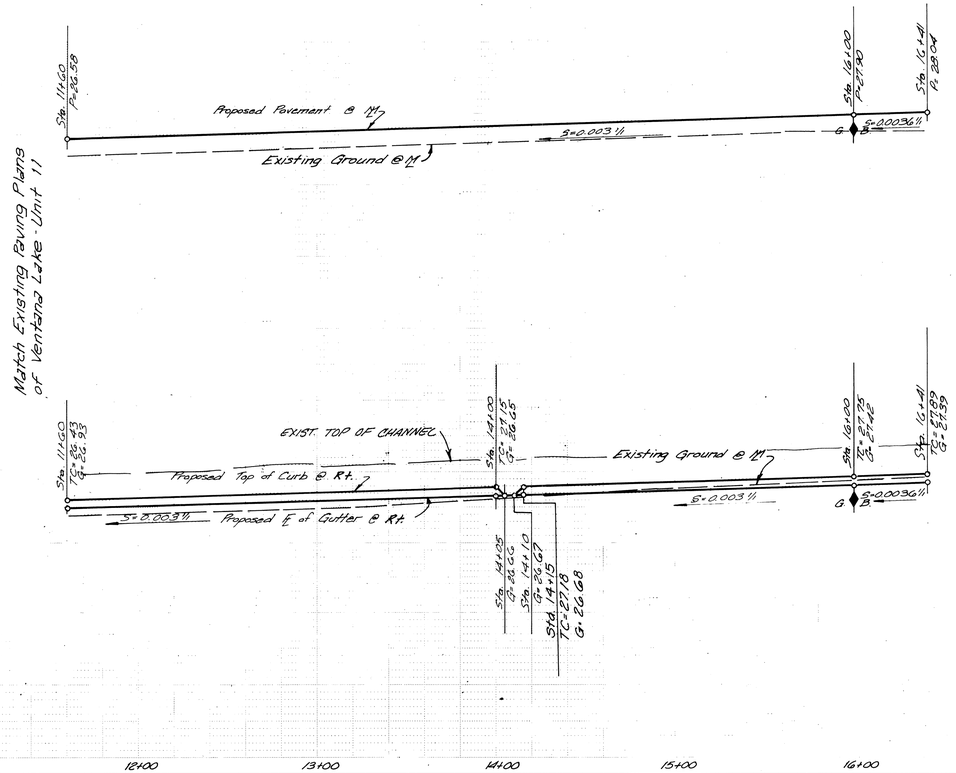




III th AVENUE

SCALE:
Horiz: 1"=40'
Vert: 1"= 4'

PHASE 3



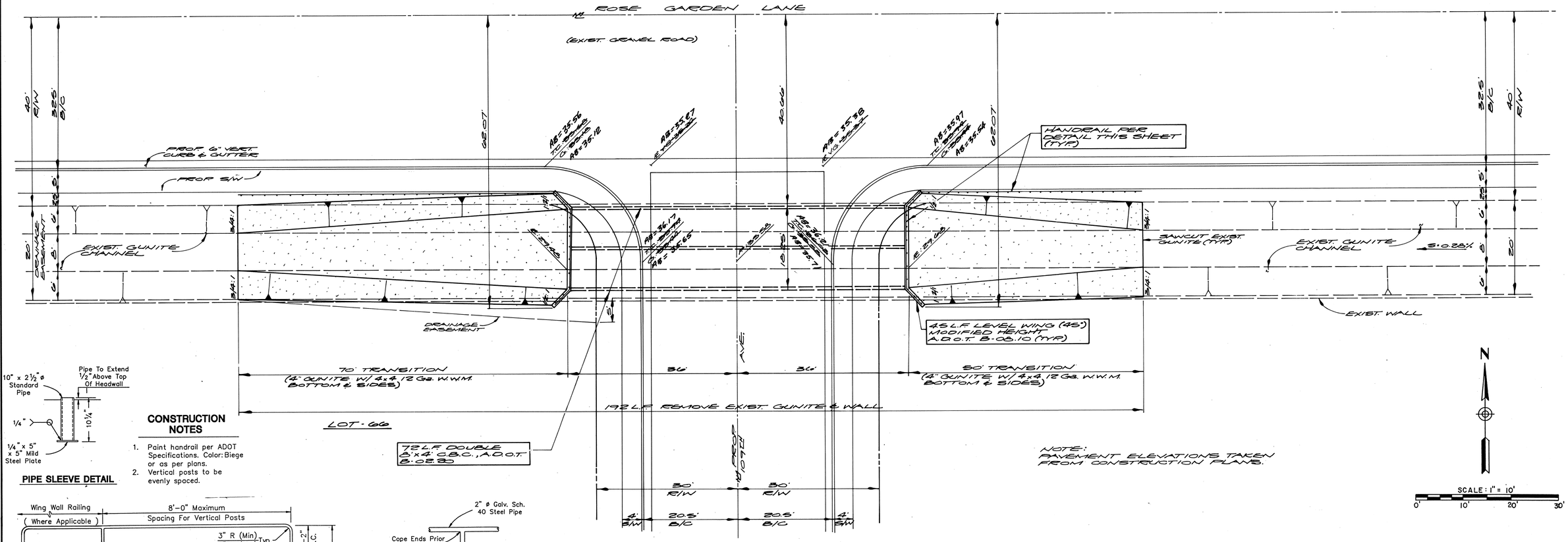
REVISED FOR PHASING
1-30-92

Collar, Williams & White Engineering, Inc.
Consulting Engineers and Land Surveyors
7922 NORTH 70TH STREET
SCOTTSDALE, ARIZONA 85251
PHONE 947-5433

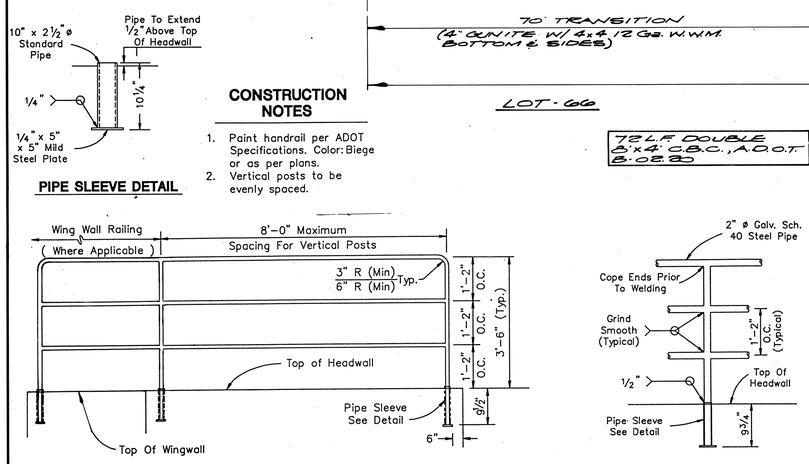
JOB NO. 840905-16

PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

PAVING PLAN VENTANA LAKES UNIT 9 SHEET 11 OF 11



PLAN



PIPE SLEEVE DETAIL

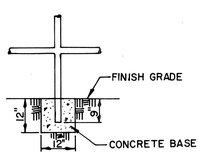
CONSTRUCTION NOTES

1. Paint handrail per ADOT Specifications. Color: Biege or as per plans.
2. Vertical posts to be evenly spaced.

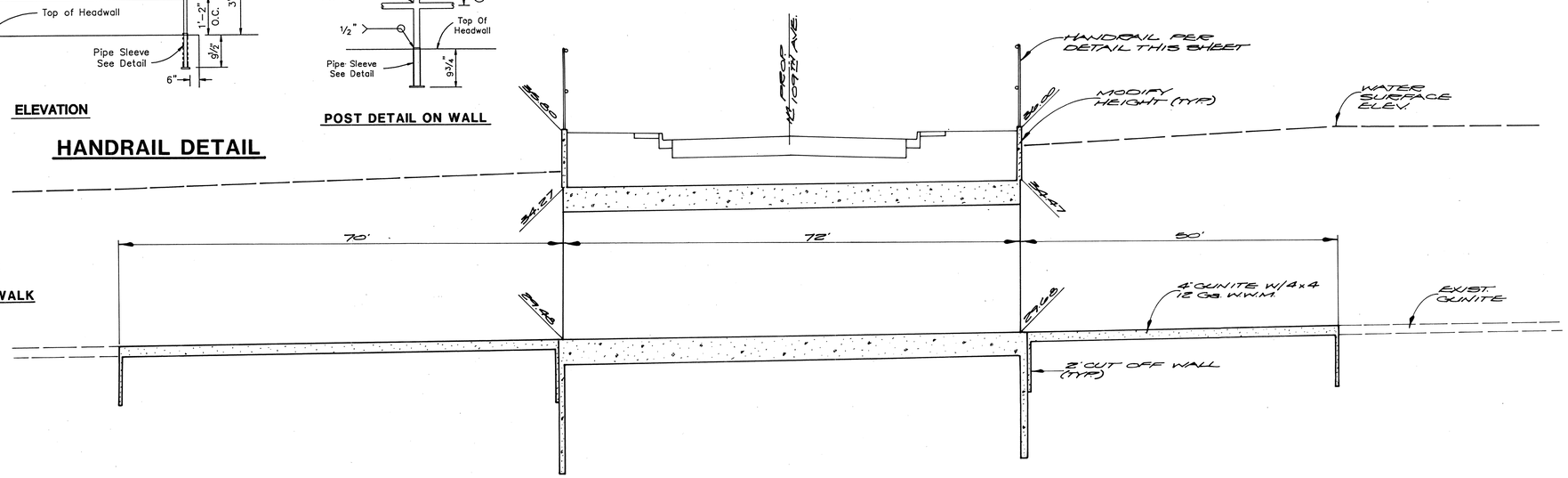
ELEVATION

POST DETAIL ON WALL

HANDRAIL DETAIL



POST DETAIL BEHIND SIDEWALK



PROFILE

SCALE: HORIZ: 1" = 10' VERT: 1" = 4'

"SCHEMATIC - NOT FOR CONSTRUCTION USE"

REVISIONS			
NO.	DESCRIPTION	DATE	APP.

RICK ENGINEERING COMPANY
2702 NORTH 44th STREET
SUITE 100A
PHOENIX, ARIZONA 85008
BUS (602)957-3350
FAX (602)956-5488

PROPOSED BOX CULVERT

109TH. AVE. & ROSE GARDEN LANE

DESIGNED: G.J.T.
DRAWN: M.E.S.
CHECKED: R.E.M.
DATE: 9-92

SHEET **11A** OF **11**

PROJECT NO. 1810

BRUNING 44-232

168120