

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Casita Vista - Unit Two ZONE ATLAS/DRNG. FILE #: K-11-~~7~~108

LEGAL DESCRIPTION: Casita Vista Unit 2 -

CITY ADDRESS: 52nd Street N.W. - Just North of Central

ENGINEERING FIRM: RIVERA ENGINEERING CONTACT: Raul A. Rivera

ADDRESS: 2624 Valencia Dr. N.E. PHONE: 881-3419

OWNER: Virgil Gil CONTACT: Virgil Gil

ADDRESS: 3821 Avalon N.W. PHONE: 839-0838

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

YES

NO

COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. 4496.90

TYPE OF SUBMITTAL:

DRAINAGE REPORT

DRAINAGE PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

GRADING PLAN

EROSION CONTROL PLAN

ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

SKETCH PLAT APPROVAL

PRELIMINARY PLAT APPROVAL

SITE DEVELOPMENT PLAN APPROVAL

FINAL PLAT APPROVAL

BUILDING PERMIT APPROVAL

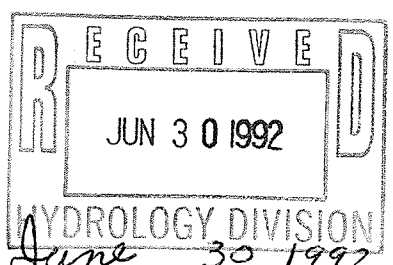
FOUNDATION PERMIT APPROVAL

CERTIFICATE OF OCCUPANCY APPROVAL

ROUGH GRADING PERMIT APPROVAL

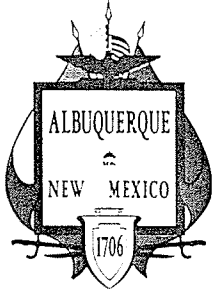
GRADING/PAVING PERMIT APPROVAL

OTHER _____ (SPECIFY)



DATE SUBMITTED: June 30, 1992

BY: Raul a. Rivera



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 23, 1992

Raul A. Rivera, P.E.
RIVERA ENGINEERING
2624 Valencia Dr. SE
Albuquerque, N.M. 87110

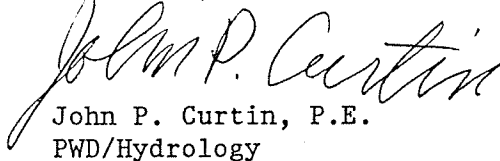
RE: DRAINAGE & GRADING PLAN FOR CASITA VISTA - UNIT TWO (K-11/D8)
RECEIVED JUNE 30, 1992 FOR BUILDING PERMIT APPROVAL

Dear Mr. Lewis:

Based on the information included in the submittal referenced above, this project is approved for Building Permit. The Drainage & Grading plan must be included in the set of construction document that you submit for the Building Permit.

If I can be of further assistance, you may contact me at 768-2727.

Sincerely,

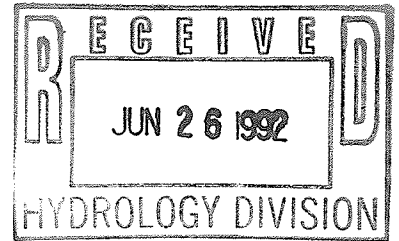

John P. Curtin, P.E.
PWD/Hydrology

WPHYD+3474

PUBLIC WORKS DEPARTMENT

RIVERA ENGINEERING
 2624 Valencia Dr. N.E.
 Albuquerque, NM 87110
 June 23, 1992

Gilbert Aldaz, Civil Engineer
 Hydrology Section, Public Works Department
 Albuquerque, NM 87103



PROJECT: CASITA VISTA - UNIT 2 PROJECT NO. 4496.90

Mr. Gilbert Aldaz,

As per discussion of the drainage plan on the above project the following computations were made using the DRAINAGE DESIGN CRITERIA FOR BERNALILLO COUNTY. For this purpose, all of the area within 20 feet from the property line, all the street area and roofs will drain into the street. On the remaining area, runoff volume will be ponded within each lot.

The location is Zone 1 - West of the Rio Grande	Table 1			
100 year - 6 hour rain - 2.20 inches	Table 2			
Land treatments -	Table 4	B (lawns)	C (S.W.Lands.)	D (Impervious)
Excess Precip.(in)	Table 8	0.60	0.82	1.87
Peak Q (cfs/ac)	Table 9	2.30	3.15	4.80
Areas (sq.ft.)		2,182	2,182	16,720
(acres)		0.0501	0.0501	0.3838

$$100 \text{ yr. Vol.} = 16,720(1.87/12) + 2,182(0.82/12) + 2,182(0.60/12) = 2,864 \text{ cuft.}$$

$$100 \text{ yr. Q} = (2.30 * 0.0501) + (3.15 * 0.0501) + (4.80 * 0.3838) = 2.11 \text{ cfs}$$

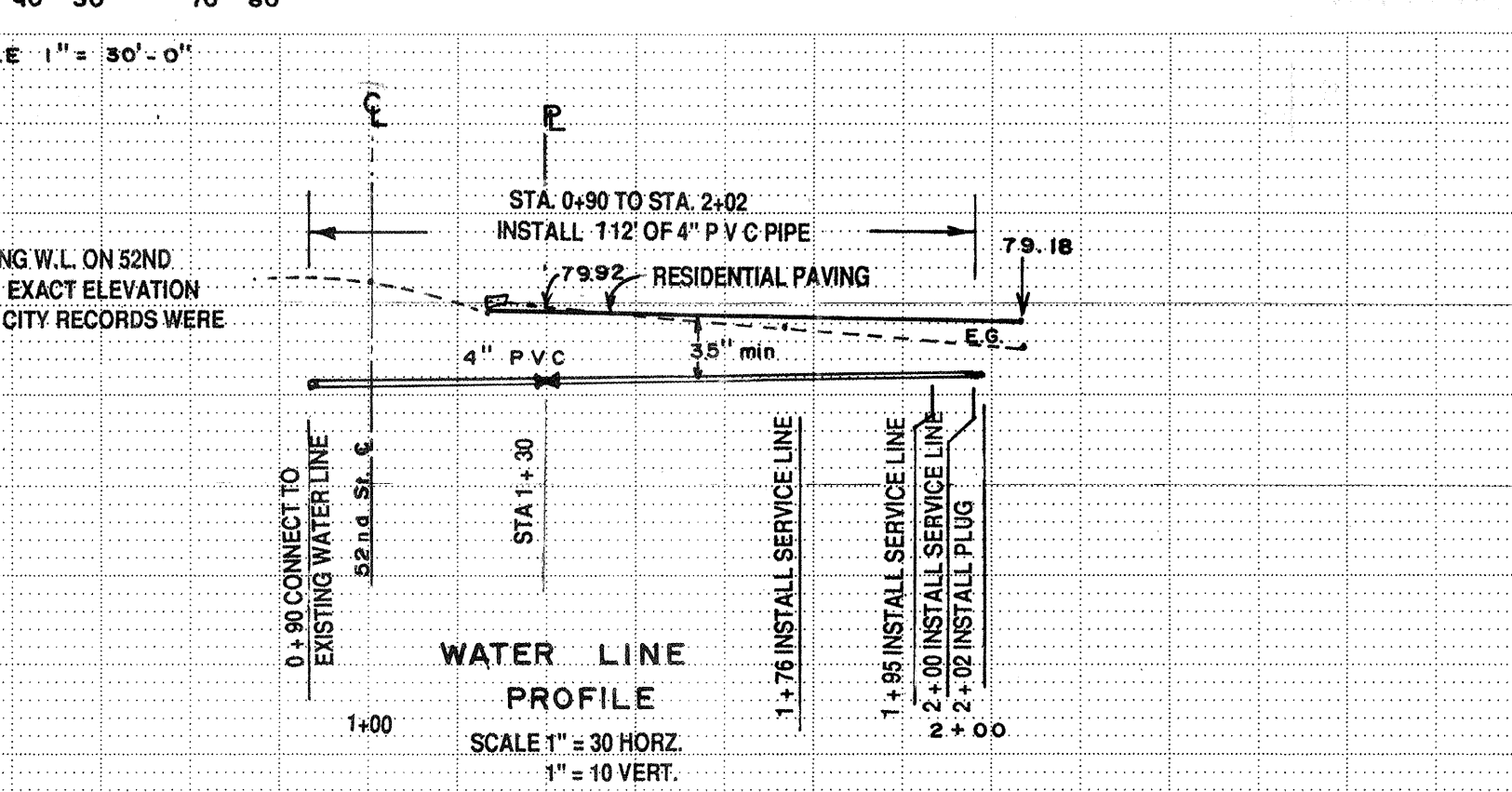
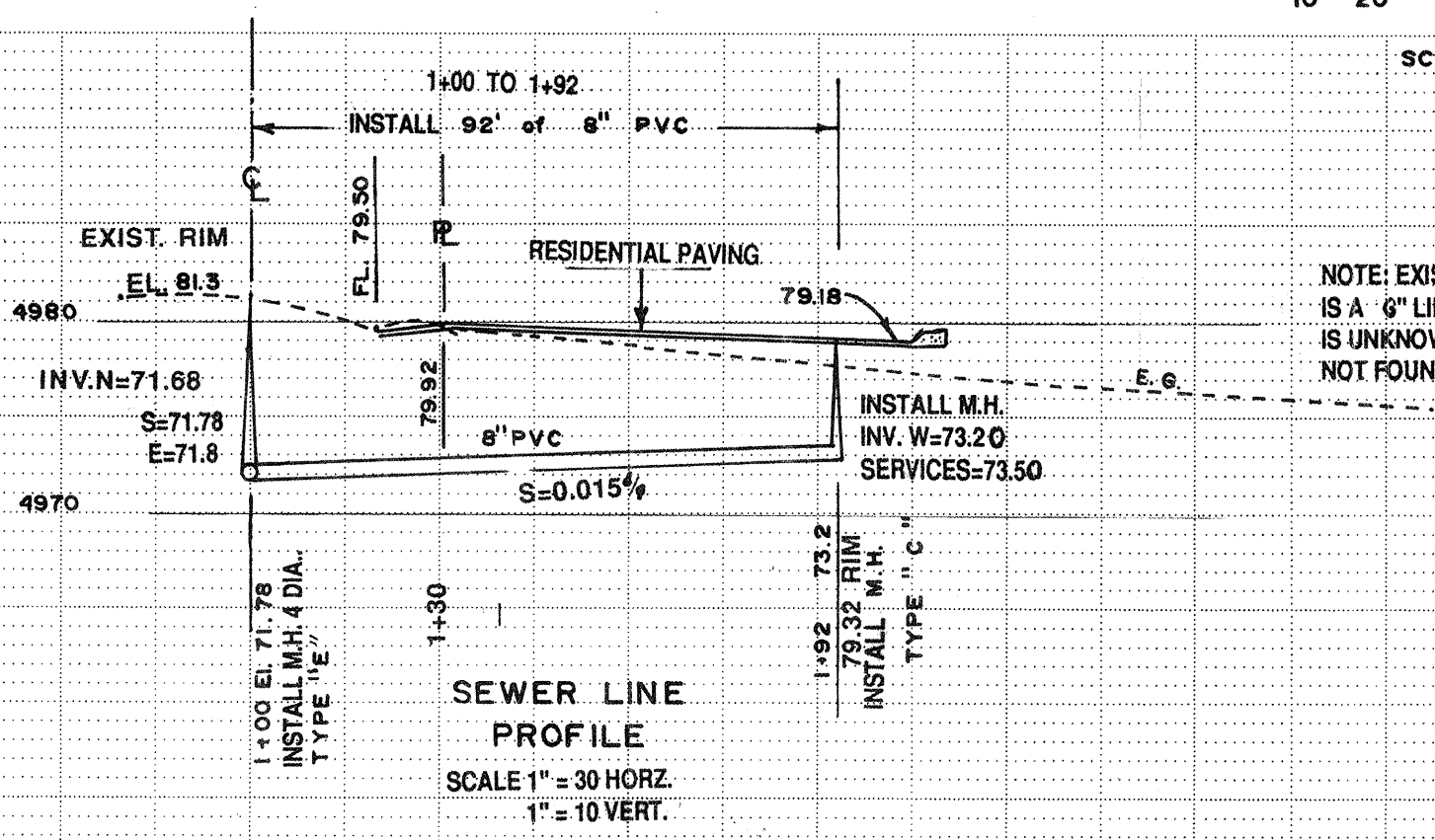
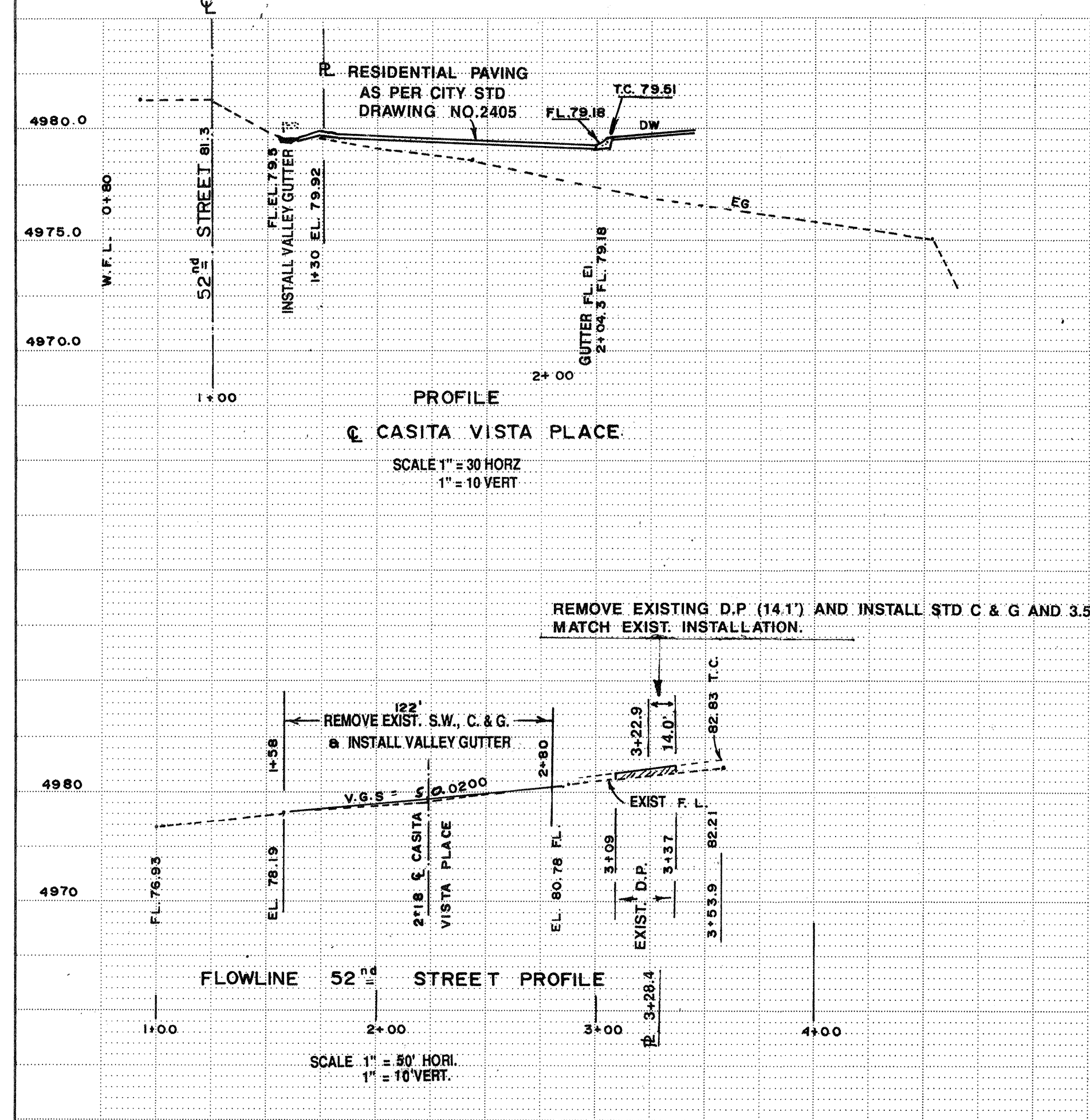
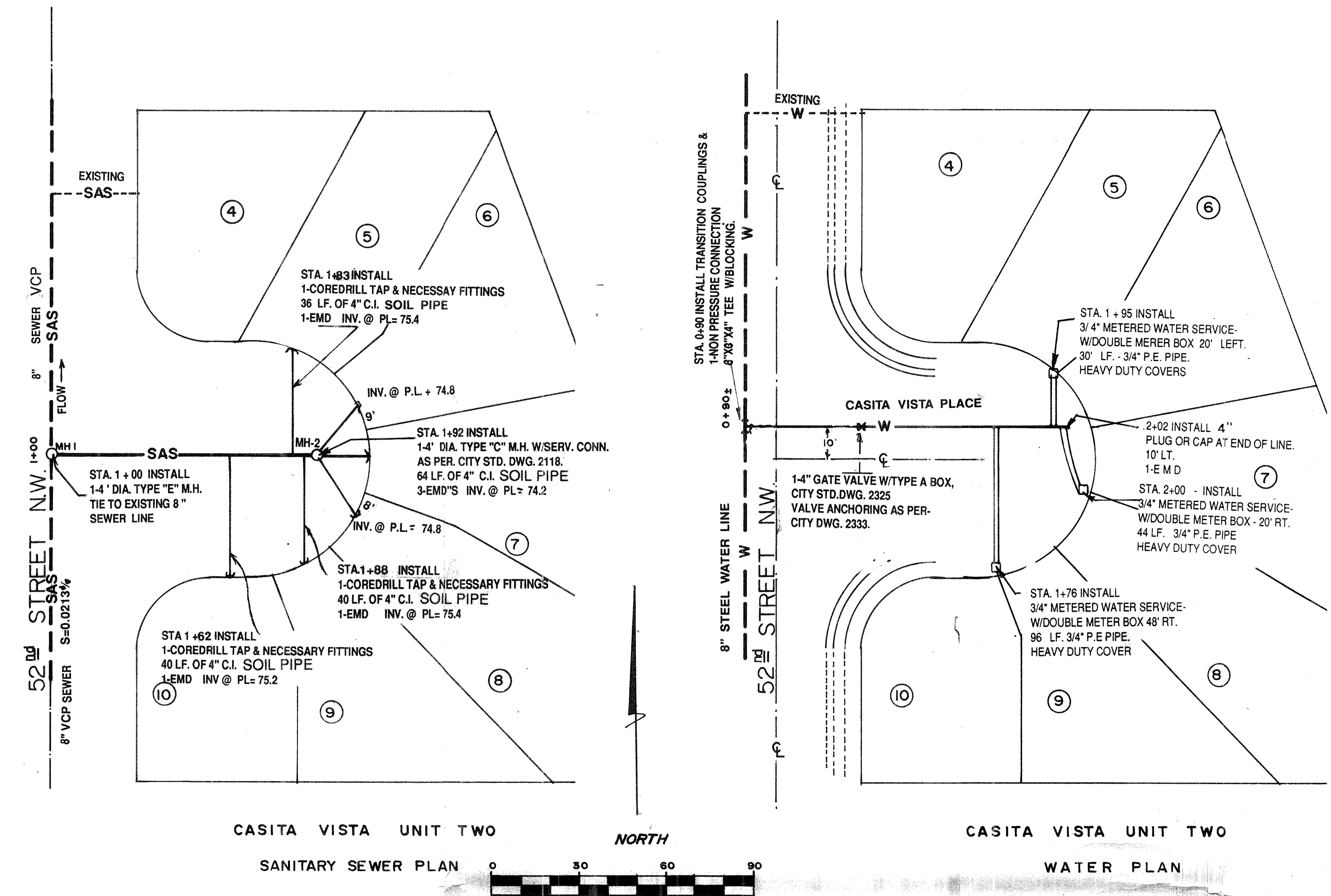
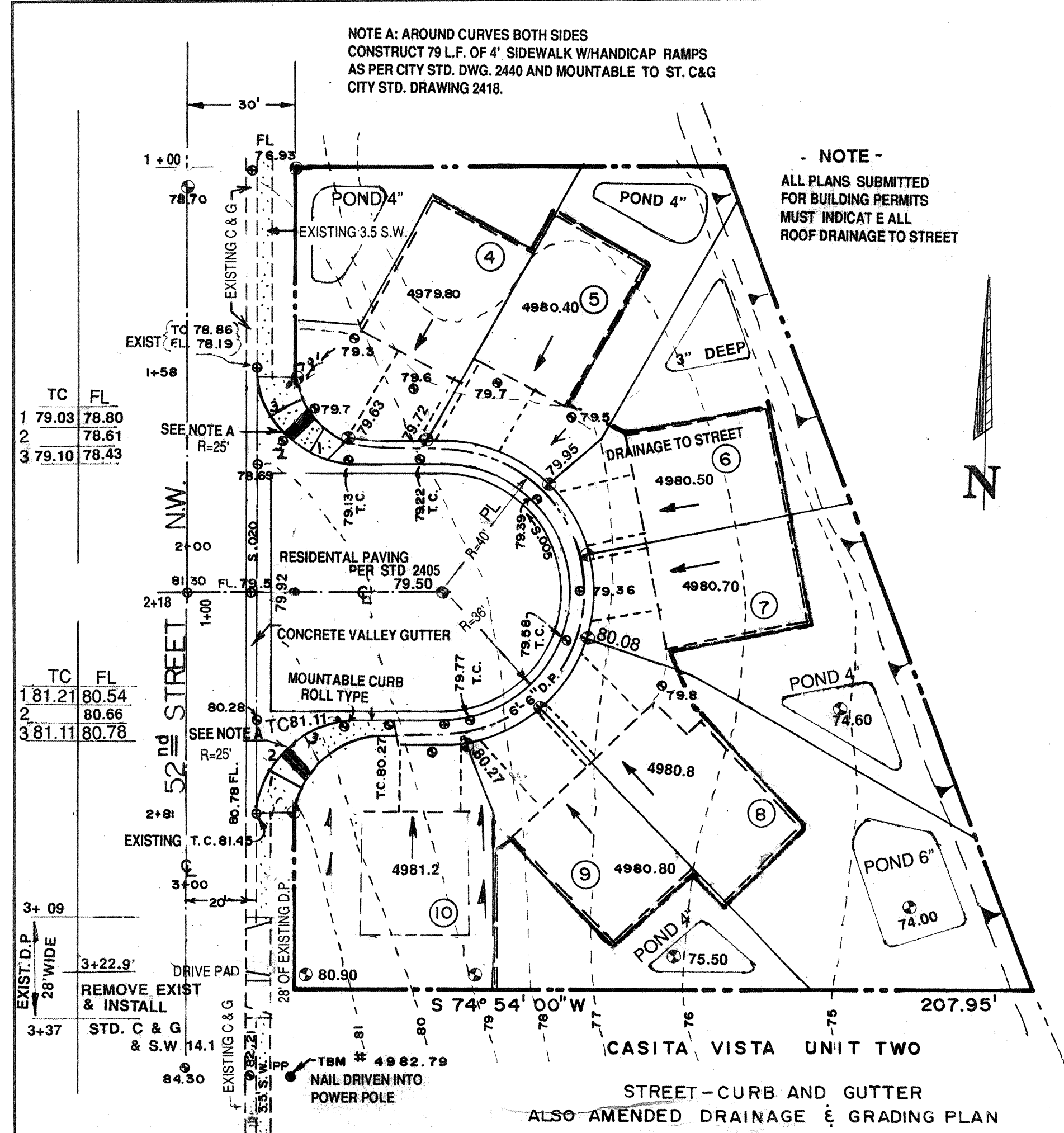
The following is a table with the data used to compute the 100 year volume of runoff from the areas of each lot not draining to the street. It was assumed that 50 percent was lawns and 50 percent S.W. landscaping, therefore the excess precipitation from Table 8 was averaged and a value of 0.71 inches was used as shown below.

Lot	Area	Exc.Precip.(Av)	. Vol.	Ponding Area	Depth	
	S.F.	Inches	Cu.Ft.	S.F.	Ft.	In.
4	1942	0.71	115	400	0.16	1.9
5	1573	0.71	93	272	0.34	4.1
6	1,058	0.71	63	338	0.19	2.2
7	2,277	0.71	135	480	0.28	3.3
8	4,344	0.71	257	600	0.43	5.1
9	1,961	0.71	116	360	0.32	3.9

The SCS procedure using Plate 22.2 C-2 for Hydrologic Soil Group B (Soil MWA, Madurez-wink Association from the SCS, Standard Soil Survey report for Bernalillo County) and Plate 22.2 C-4 with the Curve No. of 70 and rainfall of 2.2 inches gave me a direct runoff of 0.40 inches. Using these values gave much smaller volumes of runoff than the above procedure. My conclusion is that the above values are on the conservative side.

If you have any questions please call me at 881-3419 or write to the address shown above. Thank you.

Raul A. Rivera
 Raul A. Rivera



A DRAINAGE DEVELOPMENT PLAN PREPARED BY COMMUNITY SCIENCES CORPORATION IN NOV. 1979 PROPOSED REAR YARD PONDS TO STORE RUNOFF FROM MOST OF THE LOT AREA. THIS IS ACCEPTABLE TO THE CITY HYDROLOGY DEPARTMENT. IT WAS AGREED THAT RUNOFF FROM THE FRONT 20 FEET AND FROM THE ROOFS WILL DRAIN TO THE FRONT INTO CASITA VISTA PLACE AND FLOW TO 52ND STREET N.W. THE DRAINAGE INFORMATION AS SHOWN ABOVE IS BASICALLY THE SAME AS THAT FROM THE 1979 REPORT WITH ONLY MINOR CHANGES. DRIVEWAY WIDTHS, HOUSE SIZES AND SHAPES, CASITA VISTA PLACE CURB AND PAVEMENT ELEVATIONS AND FINISHED FLOOR ELEVATIONS WERE CHANGED AS SHOWN ON THE PLAN ABOVE. A COPY OF PLATE 3 OF THE ABOVE MENTIONED PLAN IS BEING SUBMITTED. THE CITY HYDROLOGY DEPARTMENT HAS IN ITS FILES A COPY OF THE 1979 DRAINAGE DEVELOPMENT PLAN REPORT. THE VOLUME PRODUCED BY THE AREA NOT DRAINING TO 52ND STREET WAS CHECKED BY USING THE UPDATED PROCEDURE OUTLINED IN "DRAINAGE DESIGN CRITERIA FOR BERNALILLO COUNTY" DATED APRIL 1990, FOR THE WEST MESA AREA (ZONE 1) AND LAND TREATMENT B, THE EXCESS PRECIPITATION FOR THE 6 HOUR, 100 YEAR STORM, FROM TABLE 3 IS 0.60 INCHES, THE VOLUME PRODUCED IS VERY SMALL AND SLIGHT LOWERING OF THE REAR OR SIDE YARDS TO PRODUCE PONDS 14 BY 100 FEET, MORE OR LESS, WILL STORE THAT VOLUME WITH DEPTHS OF ONE INCH OR LESS.

WATER SHUT-OFF REQUIREMENTS

CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF THE WATER SHUT-OFF REQUIREMENTS IN CONJUNCTION WITH COMPLETION OF THIS PROJECT. AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION CONTRACTOR SHALL CONTACT PWD/WATER SYSTEMS DIVISION (857-8200) TO INITIATE IMPLEMENTATION OF THIS WATER SHUT-OFF PLAN TO COMPLETE THE NON-PRESSURE CONNECTION SHOWN, THE EXISTING VALVES LISTED BELOW AND MARKED WITH AN ARROW (1) ON THE ABOVE MAP MUST BE CLOSED BY PWD/WATER SYSTEMS PERSONNEL.

MAP#	VALVE#
K-11	483
K-11	421

