



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 13, 1994

Raymond Hensley
C.A.M.I.
4520 Montgomery Blvd. NE Suite #5
Albuquerque, NM 87109

RE: DRAINAGE PLAN FOR AN ADDITION TO 708 MARQUETTE NW (J14-D106)
ENGINEER'S STAMP DATED 4/13/94.

Dear Mr. Hensley:


Based on the information provided on your April 29, 1994 submittal, listed are some concerns that will need to be addressed prior to final approval:

1. Benchmarks - location, description and elevation of the:
 - a. Albuquerque Control Survey Vertical Datum used.
 - b. Permanently marked T.B.M. on site.
2. top of curb and flowline elevations on Marquette & Seventh St.
3. Your report identifies that you have a total of .689 cfs existing and .634 cfs proposed flow rates. The plan drawing indicates .76 cfs from basin 1 & .79 cfs from basin 2. I am confused to the difference in the quantities. Pre-design indicates that you are limited to the existing flow rate.
4. The S.O. 19 format for the proposed sidewalk culvert must be included on the plan drawing. The six notes and the sign-off block. You must also identify the City of Albuquerque Spec. No. for the sidewalk culvert (attached). This information must be on the plan drawing. Two copies of plan with the resubmittal.
5. Replat or paper easement for cross lot line drainage.
6. Please be advised that no developed run-off is allowed over and across a public sidewalk. Either a sidewalk culvert or a drivepad must be used.

Raymond Hensley
Page 2

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,


Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/8524

c:  File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: 708 Marquette Addition ZONE ATLAS/DRNG. FILE #: J-14 / 0102

RB #: _____ EPC #: 794-74 WORK ORDER #: _____

LEGAL DESCRIPTION: Lots 4-11, Block #1, Perfecto Armijo & Brothers Addition, Lot E, A.L. Mitchell Sub-division

CITY ADDRESS: 708 Marquette NW, Albuquerque, NM 87102

ENGINEERING FIRM: C.A.M.I. CONTACT: Raymond Hensley

ADDRESS: 4520 MONTGOMERY N.E. #5 PHONE: 889-9558

OWNER: 708 Partnership CONTACT: John Duhigg

ADDRESS: 708 Marquette, N.W. PHONE: 243-3751
Albuquerque, New Mexico 87102

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: Greiner, Inc. CONTACT: Tom Wagner

ADDRESS: 5971 Jefferson, N.E. PHONE: 345-3999
Albuquerque, New Mexico 87109

CONTRACTOR: Owner CONTACT: John Duhigg

ADDRESS: 708 Marquette NW PHONE: 243-3751
Albuquerque, NM 87102

TYPE OF SUBMITTAL:

- ☒ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION
- ☐ OTHER _____

PRE-DESIGN MEETING:

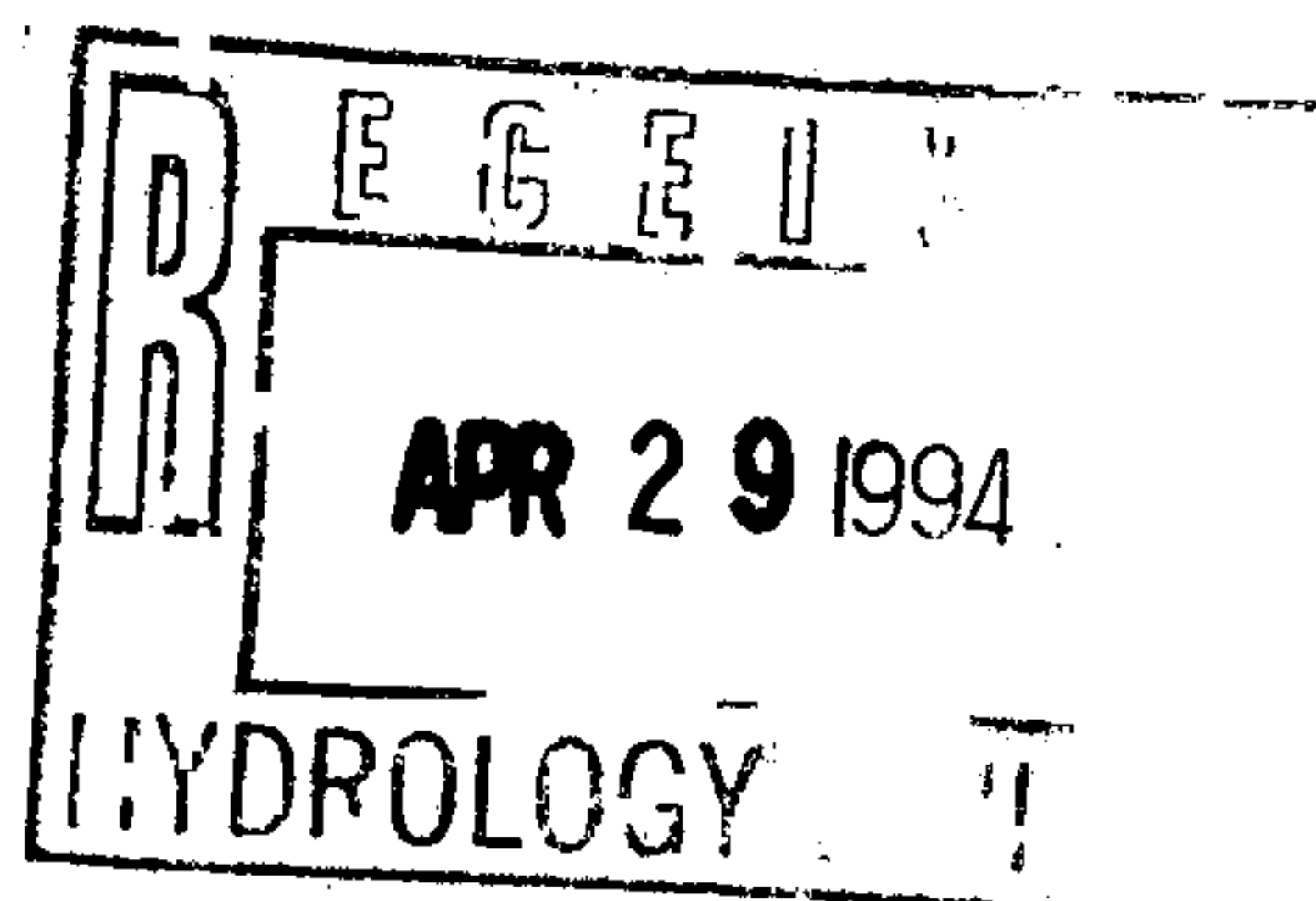
- ☒ YES
- ☐ NO
- ☐ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 4/13/94

BY: Raymond Hensley



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DEVELOPMENT DIVISION/HYDROLOGY SECTION

PRE-DESIGN CONFERENCE

DRAINAGE FILE/ZONE ATLAS PAGE NO.: J-142 DATE: 2-8-94
EPC NO.: _____ DRB NO.: _____ ZONE: SV-2
SUBJECT: Law Office Addition
STREET ADDRESS: 708 Marquette NW (7th & Marquette, SW)
LEGAL DESCRIPTION: Lot 4 & 5 N portion 6-11 Perfecto Arroyo
B/K I

APPROVAL REQUESTED: _____ PRELIMINARY PLAT _____ FINAL PLAT
_____ SITE DEVELOPMENT PLAN ✓ BUILDING PERMIT
_____ GRADING/PAVING PERMIT _____ OTHER _____

	WHO	REPRESENTING
ATTENDANCE:	<u>Raymond Hensley, P.E.</u>	<u>CAMI</u>
	<u>John Dunigan</u>	<u>Dunigan, Cronin & Sperry (OWNER)</u>
	<u>John Curtin</u>	<u>C.O.A./PWU/Hyd</u>

FINDINGS:

Panel 28 shows site in Zone B.
Project is an infill site. Discharge
is limited to existing rate. All
discharge to the street must be
thru a driveway or a sidewalk
culvert (which would require an S.O.P).
Check off-site flows. Survey
must be mean sea level.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: <u>John Curtin</u>	SIGNED: <u>Raymond Hensley</u>
TITLE: <u>CE/Hydrology</u>	TITLE: <u>ENGINEER</u>
DATE: <u>2-8-94</u>	DATE: <u>2/7/94</u>

****NOTE**** PLEASE PROVIDE A COPY OF THIS PRE-DESIGN FORM WITH THE DRAINAGE SUBMITTAL.

DRAINAGE REPORT
FOR
OFFICE BUILDING ADDITION
7TH ST. AND MARQUETTE AVE.

Zone Atlas Sheet J-14-Z

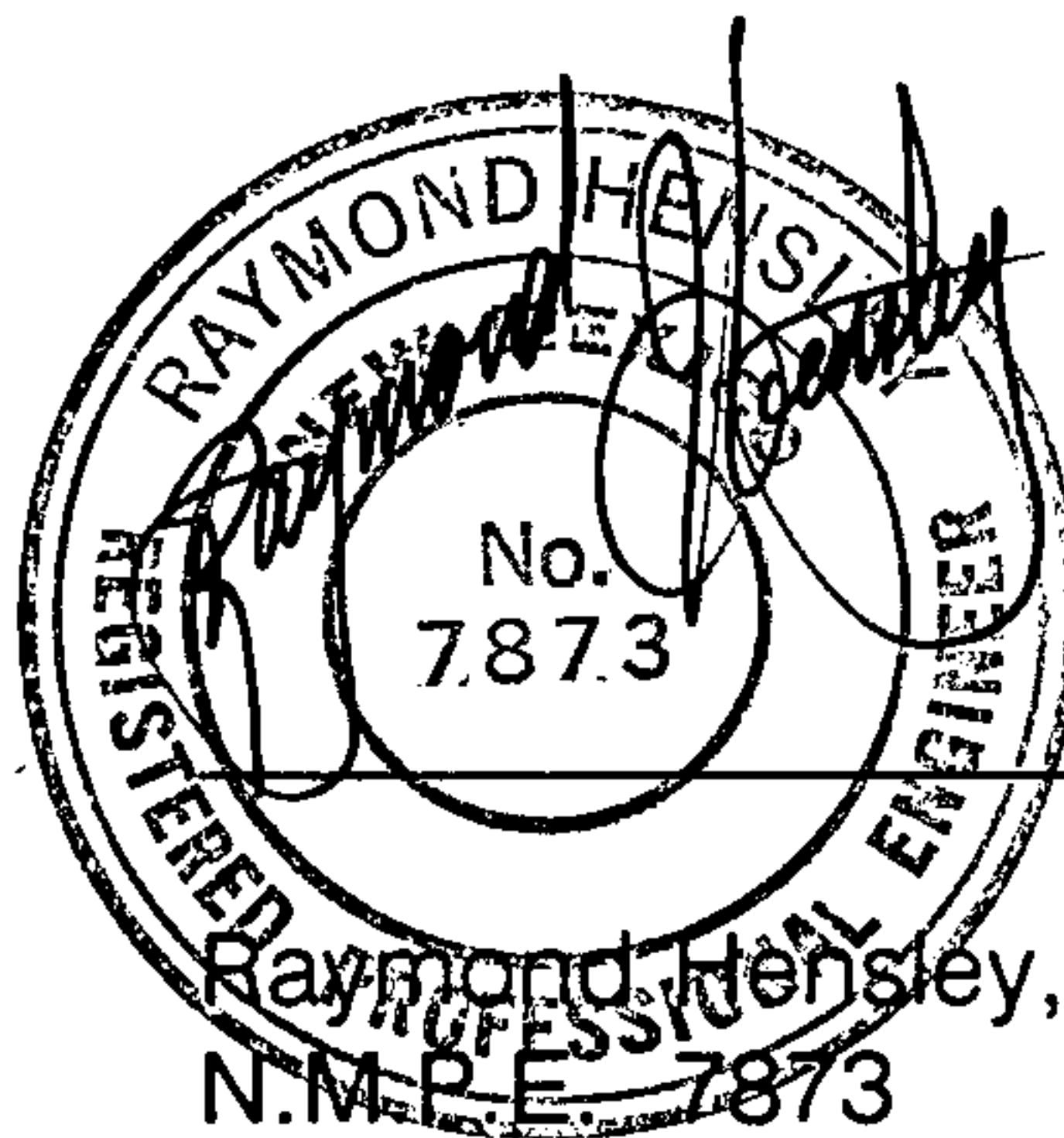
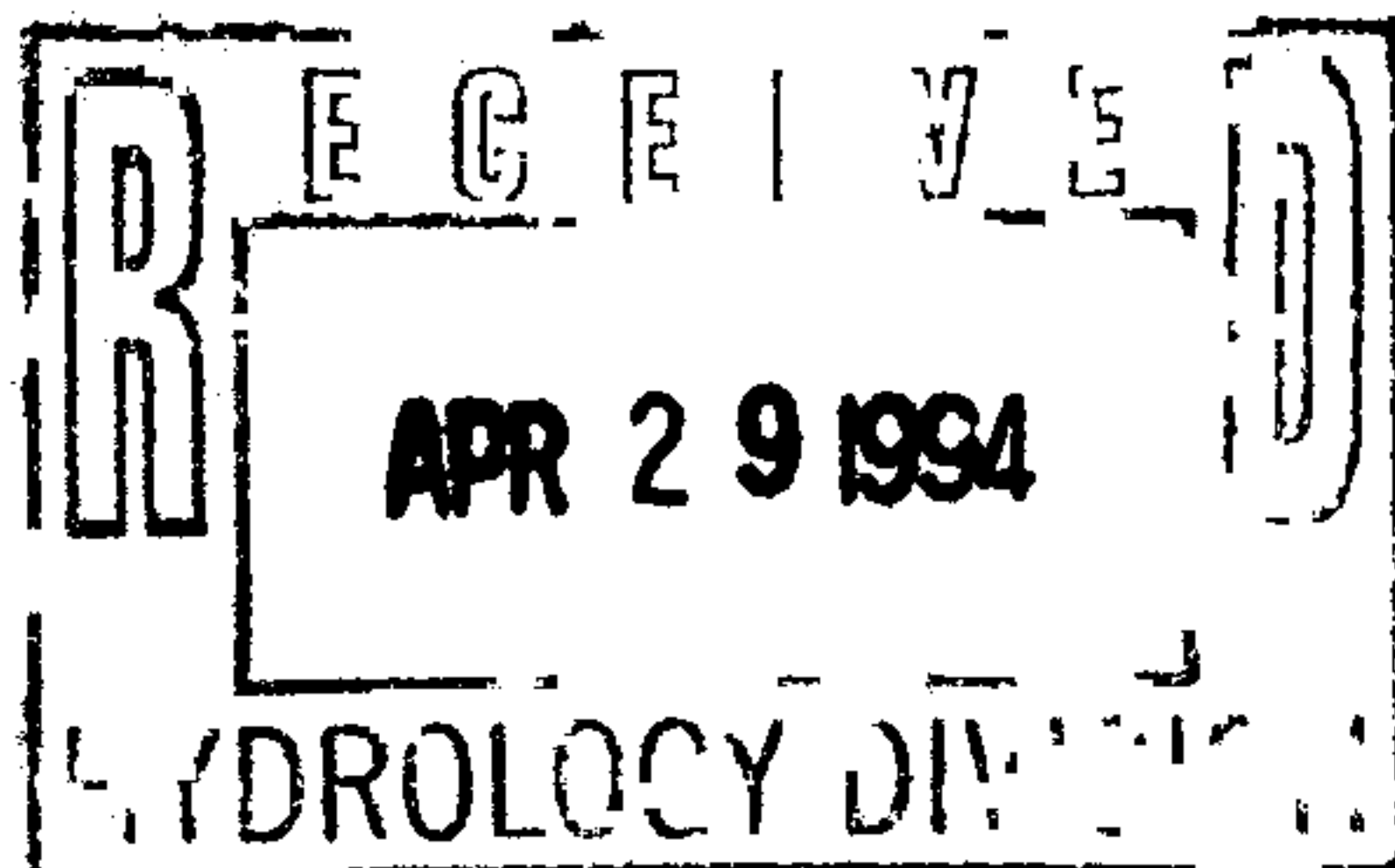
APRIL 1994

PREPARED FOR

Duhigg, Cronin and Spring
708 Marquette Ave N.W.
Albuquerque, New Mexico 87103

PREPARED BY

Construction, Analysis and Management, Inc.
4250 Montgomery, N.E.
Suite 5,
Albuquerque, New Mexico 87109



Raymond Hensley, P.E.
N.M.P.E. 7873

4/13/94

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PURPOSE

The purpose of this report is to analyze the existing and proposed developed drainage on the site for the Office Addition, and to propose solutions to control the excess storm water runoff resulting from the 100-year storm falling on the adjacent and subject parcels.

PROJECT LOCATION AND DESCRIPTION

The site is located south of Marquette Ave. on the west side of Seventh St. including .328 acres more or less. It is bounded on the west by a commercial lot, and on the south by commercial lot and a parking lot. (see the appendix, plate 1 for location map and plate 4 for floodway map). The existing site consists of .328 acres of developed and impervious surface, containing buildings and paving. The parcel slopes from south to north at about 1 percent. The proposed development will not create any additional area of impermeable surface.

EXISTING DRAINAGE CONDITIONS

The site is bounded by a paved roadway, Marquette Ave., on the north, a parking lot and Seventh St. to the east, a developed commercial lot containing a residential style building to the west, and paved parking areas to the south. The subject is located beyond the 100 year prudent limit flood plain, but within the 500 year limit. Please refer to plate 4.

The location of the property, shown on plate 1, indicates that the precipitation zone for the subject is Zone 2 according to the Development Process Manual, Volume 2, Section 22.2 - HYDROLOGY, Section A-1. Likewise, the soil conditions are given by Table A-4 as Treatment D.

There are no existing off-site drainage flows. The storm water flows are discharged to the north and east. The basins for the generation of these flows are indicated as Basin 1 and 2. The following are the calculations for the out flows for the subject property, using the DPM, Section 22.2, A-6:



$$Q_{p100} = Q_{pA} \times A_A + Q_{pB} \times A_B + Q_{pD} \times A_D$$

(1) Equation a-10

<u>BASIN 1</u>	<u>AREA</u>	<u>PEAK DISCHARGE</u> <u>(table A-9)</u>	<u>FLOW</u>
Treatment B	216 sf	.78 cfs/acre	.004 cfs
Treatment D	6,572 sf	2.12 cfs/acre	.320 cfs
Total	6,788 sf		.324 cfs
<u>BASIN 2</u>			
Treatment D	7,500 sf	2.12 cfs/acre	.365 cfs

.324
 .320

 .644

DEVELOPED DRAINAGE CONDITIONS

The site plan (Plate 3) shows the configuration of the proposed development of the property. Approximately 1,800 square feet will be converted from asphalt paving to building retaining the impermeable surfaces. In addition, there will be planters created in basin 2, while the minor landscape area of basin 1 will be paved.

Subsequent to development the property will be consist of impervious surfaces, Treatment "D", and landscaped areas, Treatment "B".

DPM, Section 22.2, A-6:

$$Q_{p100} = Q_{pB} \times A_B + Q_{pD} \times A_D$$

(2) Equation a-10

<u>BASIN 1</u>	<u>AREA</u>	<u>PEAK DISCHARGE</u> <u>(table A-9)</u>	<u>FLOW</u>
Treatment B	400 sf	.78 cfs/acre	.007 cfs
Treatment D	6,988 sf	2.12 cfs/acre	.340 cfs
Total	7,388 sf		.347 cfs
<u>BASIN 2</u>			
Treatment B	1,421 sf	.78 cfs/acre	.025 cfs
Treatment D	5,479 sf	2.12 cfs/acre	.267 cfs
Total	6,900 sf		.292 cfs

.347
 .340

 .687

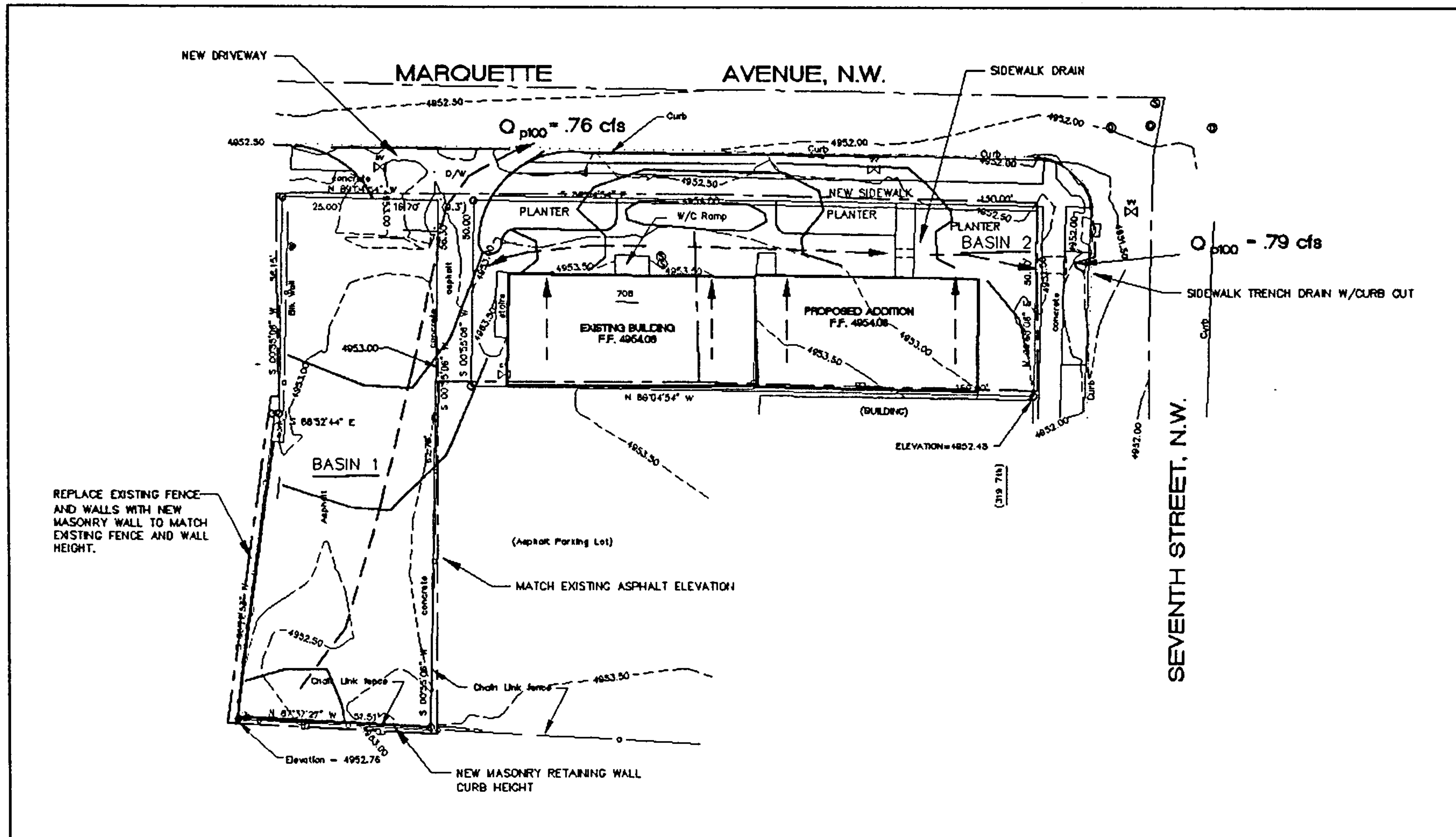


Figure 2 - Developed Site Plan (Plate 3)

The difference between the existing conditions and the developed conditions is insignificant. The total out flow from both basins for the proposed development is .639 cfs, compared to the existing conditions of .686 cfs. There is a minor variance in the distribution between basin 1 and 2. However, the gutter flow on Marquette and the out flow on to Seventh St. converge on the same drop inlet at the corner of Seventh and Marquette.

RECOMMENDATIONS

Delete existing driveways on Marquette. Construct a new drive to meet city standards as the parking exit to replace the existing alley driveway. Construct new grades, landscaping and paving in accordance with the proposed drainage plan.

CONCLUSIONS

If the above recommendations are followed, the site will be protected from flooding and the potential downstream flooding situation will not be altered significantly during the 100-year storm event.

APPENDIX

VICINITY MAP
Plate 1

FLOODWAY MAP
PORTION OF FEMA MAP PANEL 35002 0027
PLATE 4

