

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 14, 2002 REVISED JUNE 14, 2002

June Page, P.E. Resource Technology, Inc. 5501 Jefferson NE Suite 200 Albuquerque, New Mexico 87109

RE: THE TOWERS SUBDIVISION UNIT 1

(L-9/D27A)

Engineers Certification for Release of Financial Guaranty

Engineers Stamp dated 12/14, 2001 Engineers Certification dated 5/6/2002

Dear Ms. Page:

Based upon the information provided in your Engineers Certification dated 5/6/2002, and based on the letter dated 6/13/2002, by Ten West LLC (Frank Wilson), the above referenced plan is adequate to satisfy the Grading and Drainage Certification for release of financial guaranty for the above referenced project.

This revision will be to amend the acceptance letter of the Engineers Certification by deleting paragraph 2 ..."However, prior to release of financial guaranty, SAD 222 will need to be completed and accepted by the City".

If you have any questions, please call me at 924-3981.

Sincerely,

Teresa A. Martin

Hydrology Plan Checker Public Works Department

BUB

C: Arlene Portillo, PWD – #679981 File J. 1. 14

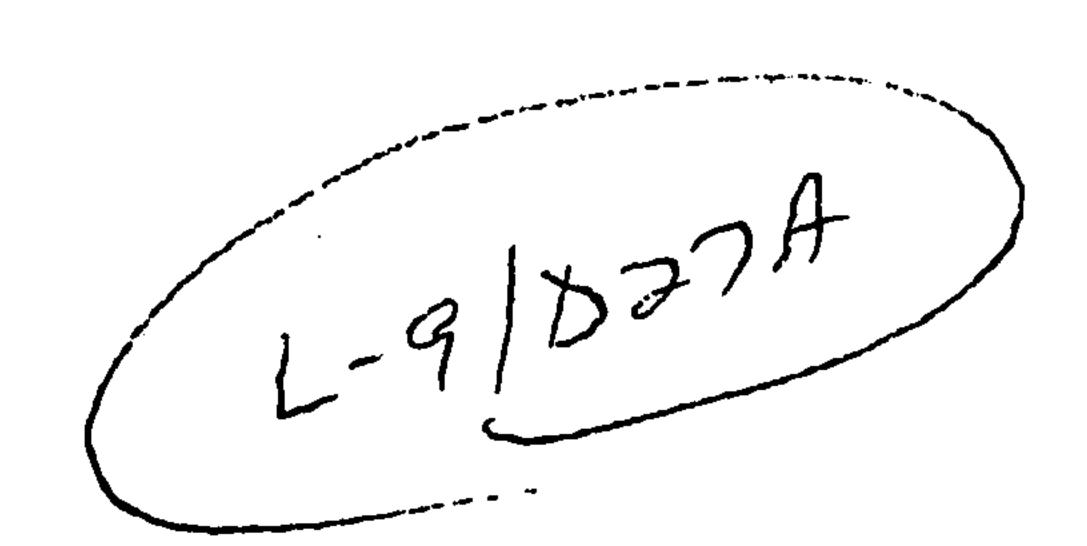
TEN WEST L.L.C.
333 Lomas Blvd., N.E.
Albuquerque, NM 87102
(505) 998-0305 / Fax 998-0306
chanes@swsurvey.com

June 13, 2002

Mr. Brad Bingham, PE
City of Albuquerque
Hydrology/Design Review
600 Second Street N.W. 2nd Floor
Albuquerque, NM 87102
VIA FAX NO 924-3864

Re

The Towers Subdivision, Unit 1



Dear Brad:

I am writing you to request that you revise your comments in the letter dated May 15, 2002 (attached) regarding the SAD 222. As of the end of May, Ray Macy advised me that Tower Road, including the storm drains were deemed 99.9% complete. Therefore, I am requesting that you revise your letter deleting the requirement that the SAD 222 be complete to release the financial guaranty.

Thank you in advance for your attention to this matter.

Respectfully,

Franklin E. Wilson Managing Partner

ΥC

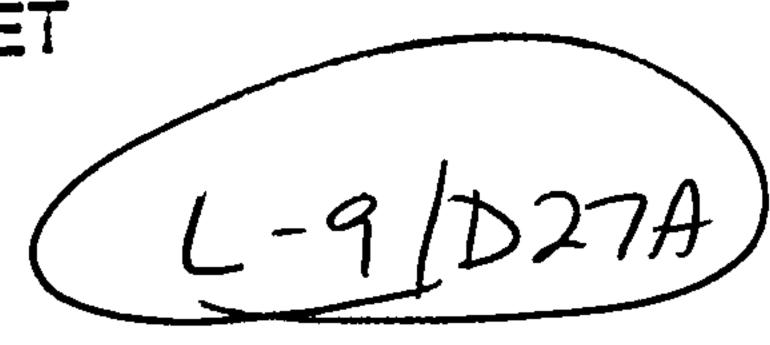
Ray Macy VIA FAX NO. 275-0748

crh/enc.

c:\towers\bingham

DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)



PROJECT TITLE: THE TOWERS DRB #: EPC#:	ZONE MAP/DRG. FILE #: L9 =
	WORK ORDER#:
LEGAL DESCRIPTION: PROJECTED SECTION CITY ADDRESS: EUCARIZ AV SW TO TO	28 TION, R3E NMPM WELL ROAD BETWEEN 944 = 90th
ENGINEERING FIRM: RESOURCE JECHNOLOGY ADDRESS:	PHONE: 243.7300
CITY, STATE:	ZIP CODE: 37109
OWNER: JOWER WEST JOINT VE ADDRESS: 333 LOMAS N.E. CITY, STATE: ALBQUER PUE N	NTURE CONTACT: FRANK WILSOM PHONE: 998.0305 ZIP CODE: 87102
ARCHITECT: ADDRESS: CITY, STATE:	CONTACT: PHONE: ZIP CODE:
SURVEYOR: ADDRESS	CONTACT: PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR: ADDRESS: CITY, STATE:	CONTACT:PHONE:ZIP CODE:
CHECK TYPE OF SUBMITTAL: DRAINAGE REPORT DRAINAGE PLAN CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEERS CERTIFICATION (TCL) ENGINEERS CERTIFICATION (DRB APPR. SITE OTHER	CHECK TYPE OF APPROVAL SOUGHT: SIA / FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D. APPROVAL S. DEV. PLAN FOR BLDG. PERMIT APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED: YES NO COPY PROVIDED	DEC 1 7 2001 HYDROLOGY SECTION
DATE SUBMITTED:	_BY: June Page_

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submit The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres c



5501 Jefferson Blvd. NE, Ste. 200 Albuquerque, NM 87109

Telephone: (505) 243-7300 FAX: (505) 243-7400

E-Mail: rti@nm.net

TRANSMITTAL

ATTN: RE: Brodley Bing ham OUR PROJECT NO.: 01-180 Towers WE TRANSMIT THE FOLLOWING: SHOP DRAWINGS SPECIFICATIONS CHANGE ORDER PRINTS COPY OF LETTER UNDER SEPARATE COVER VIA DOCUMENTS FOR YOUR: APPROVAL DISTRIBUTION TO PARTIES REVIEW & COMMENT RECORD USE INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION And Grading and Drainage Plan for the Towners REMARKS: HYDROLOGY SECTION	TO: City 25 P.0.129	Albug. Pubic Works	FROM: Jone Page
RE: Bradley Bing ham OUR PROJECT NO.: 01-180 Towers WE TRANSMIT THE FOLLOWING: SHOP DRAWINGS SPECIFICATIONS CHANGE ORDER PRINTS COPY OF LETTER UNDER SEPARATE COVER VIA DOCUMENTS FOR YOUR: APPROVAL DISTRIBUTION TO PARTIES REVIEW & COMMENT RECORD USE INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION COPIES DATE ITEM DESCRIPTION Drainage Report with Master Drainage Plan And Grading and Drainage Plan for the Towards REMARKS: REMARKS: HYDROLOGY SECTION	Albug,	Nm 87103	DATE: 12/14/01
WE TRANSMIT THE FOLLOWING: SHOP DRAWINGS SPECIFICATIONS CHANGE ORDER PRINTS COPY OF LETTER UNDER SEPARATE COVER VIA DOCUMENTS FOR YOUR: APPROVAL DISTRIBUTION TO PARTIES REVIEW & COMMENT RECORD USE INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION AND GRADING PLANSMIT Drainage Plan AND Grading and Drainage Plan for the Towners REMARKS: REMARKS: HYDROLOGY SECTION	ATTN:		
SHOP DRAWINGS SPECIFICATIONS CHANGE ORDER PRINTS COPY OF LETTER UNDER SEPARATE COVER VIA DOCUMENTS DOCUMENTS APPROVAL DISTRIBUTION TO PARTIES REVIEW & COMMENT RECORD INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION Drainage Sheet Drainage Report with Master Drainage Plan Qard Grading and Drainage Plan for the Towners REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	RE: Bradley B	ing ham	OUR PROJECT NO : 01-180 Towers
PRINTS COPY OF LETTER UNDER SEPARATE COVER VIA DOCUMENTS FOR YOUR: APPROVAL DISTRIBUTION TO PARTIES REVIEW & COMMENT RECORD USE INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION 1 Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towners REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	WE TRANSMIT THE F	OLLOWING:	
FOR YOUR: APPROVAL	SHOP DRAWINGS	SPECIFICATIONS	CHANGE ORDER
FOR YOUR: APPROVAL	PRINTS	COPY OF LETTER	UNDER SEPARATE COVER VIA
DISTRIBUTION TO PARTIES REVIEW & COMMENT RECORD USE INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION 1 Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towners REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	•	DOCUMENTS	
REVIEW & COMMENT RECORD USE INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION 1 Drainage Sheet 1 Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towners REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	FOR YOUR:		(
USE INFORMATION IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE. COPIES DATE ITEM DESCRIPTION 1 Drainage Sheet 1 Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towers REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	APPROVAL	DISTRIBUTION TO	PARTIES
COPIES DATE ITEM DESCRIPTION 1 Drainage Sheet 1 Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towners REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	☐ REVIEW & COMMEN	T D RECORD	
Drainage Sheet 1 Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towers REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	USE	☐ INFORMATION	
Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towers REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	COPIES DATE	ITEM	DESCRIPTION
Drainage Report with Master Drainage Plan and Grading and Drainage Plan for the Towers REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	1_	Drainage She	et
and Grading and Drainage Plan for the Towers REMARKS: DEC 1 7 2001 HYDROLOGY SECTION	1		port with Master Drainage Plan
REMARKS: DEC 1 7 2001 HYDROLOGY SECTION		\sim \sim \sim	
REMARKS: HYDROLOGY SECTION		Towers	
HYDROLOGY SECTION			
HYDROLOGY SECTION	DEMADEC.		DEC 1 7 2001
		, , , , , , , , , , , , , , , , , , ,	
			HYDROLOGY SECTION
COPY TO:	COPY TO:	·	

DRAINAGE REPORT FOR THE TOWERS SUBDIVISION

Prepared for:

TOWER WEST JOINT VENTURE
Frank Wilson, Managing Partner
333 Lomas NE
Albuquerque, NM 87102

Prepared by:

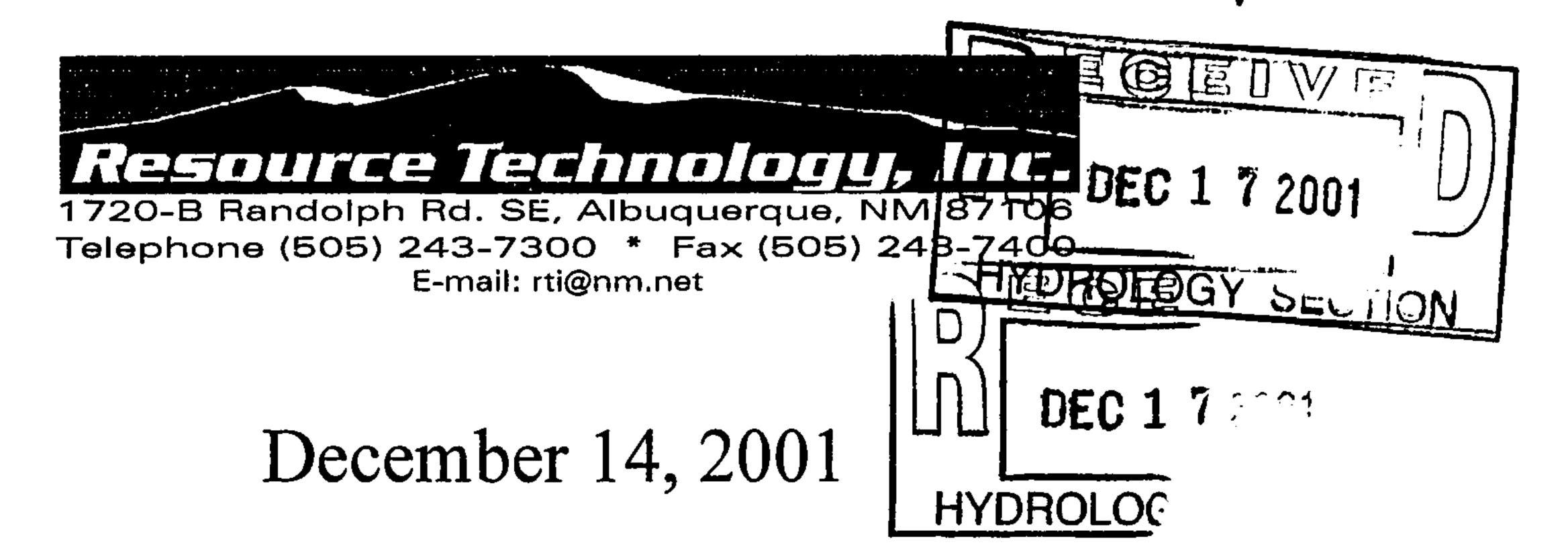


TABLE OF CONTENTS

INTRODUCT	ION	1
	S SUBDIVISION	
BACKGROU	ND DOCUMENTS	
	ONDITIONS	
	ENT PLAN	
	CONCEPT FOR THE SITE	
OFFSITE FLO	OWS HANDLING AND DISCHARGE	3
ONSITE FLO	WS HANDLING AND DISCHARGE	
IMPACTS AN	ND REQUIREMENTS	د
GRADING PI	LAN	
CALCULATI	ONS	4
SUMMARY	· · · · · · · · · · · · · · · · · · ·	4
		· · · · · · · · · · · · · · · · · · ·
TO A TOTAL TO CO		
TABLES		
TABLE A:	BASIN RIINOFF SIIMMARY	
TADLE AT		
TABLE B:	STREET CAPACITIES	· · · · · · · · · · · · · · · · · · ·
TABLE C:	PIPE CAPACITY	······································
		一屋圆屋门下了一
PLATES		
		DEC 1 7 2001
PLATE 1.	ZONE ATLAS PAGE L-9-Z	
DI ATE O	INLET CAPACITY GRAPH	HYDROLOGY SECTION
PLATE 2.	INDET CAPACITI OICALII	
FOLDER	(In Folder)	
Sheet 1:	DRAINAGE MASTER PLAN	1" = 100'
Sheet 2:	GRADING AND DRAINAGE PLAN	1" = 60'

INTRODUCTION

This report presents a Grading & Drainage Plan for The Towers Subdivision. The purpose of this plan is to: 1) identify and quantify runoff peak discharge and volume under existing and proposed conditions, and 2) present hydraulic analysis and drainage design. This submittal is made in support of the site plan for building permit for DRB action.

THE TOWERS SUBDIVISION

The proposed 24 acre development site, named The Towers Subdivision is bounded on the north by Eucariz Avenue, on the west by Eldorado Park Unit 2 Subdivision, on the south by Tower Road SW and on the east by a proposed Albuquerque Public School site, as shown on Sheet 1 in the folder in the back of this report. The site is approximately one mile southwest of Central Avenue and Unser Boulevard. See the Master Drainage Plan (Sheet 1 of the Folder).

Single family residential subdivisions have been recently constructed on the west (Eldorado Units 1, 2, 3 and 4) and south sides of the site. Areas on the north and east are undeveloped range lands with a covering of native shrubs and weeds. There are plans for the concurrent development of single family residential subdivisions to the north.

The current legal description is Tract 27A of the Plat of Eldorado Park Subdivision, Unit Two and Tracts A-1A-1b, A-1A-1a and 27A-1 as the same is shown and designated said plat, filed in the office of the County Clerk of Bernalillo County, New Mexico on January 19, 2001 in Book 2001C, Page 24 as Document No. 2001005790.

The site is within the Albuquerque City Limits and the County of Bernalillo, New Mexico. The area is shown as a portion of the Town of Atrisco Grant Unit 2 on City Of Albuquerque Zone Atlas Map L-9. This is part of Section 28, Township 10 N, Range 2 E. See Plate 1.

BACKGROUND DOCUMENTS

The following document(s) were reviewed and associated research activities conducted as part of the evaluation of requirements and downstream conditions for this project:

Special Assessment District 222, Storm Drainage plans for Tower Road SW and 98th Street SW, dated Dec 12, 2000. The Special Assessment District 222 improvements will provide stormwater removal from the study area via the Tower Road storm drain. Fully developed conditions have been generally estimated based on zoning.

Orthophotos and topography, dated 1999 provided by Bernalillo County, New Mexico.

The City of Albuquerque Development Process Manual, Volume 2, 1997.

Utility maps showing storm drainage pipes viewed on the Albuquerque City Web Site.

EXISTING CONDITIONS

Based on site visits and an orthophoto, DACA63-97-D-0030, dated 1999, provided by Bernalillo County, New Mexico most of the site is undeveloped and undisturbed consisting of local natural vegetation. Existing topography is illustrated by the Grading and Drainage Plan in the folder in the back of this report as Sheet 2. Runoff generated on this site flows from west to east to 90th Street. From this point, runoff continues east across undeveloped lands to 86th Street where it goes south to the arroyo running parallel to Tower Road.

DEVELOPMENT PLAN

The site is currently undeveloped with a cover of native shrubs and grass, with dumped refuse located over portions of the site. There are temporary soil stockpiles and temporary retention ponds serving Eldorado Park Units 1 through 4 on this site. The retention ponds will serve until the storm sewer pipe from Unit 2 in 94th Street is connected to the SAD 222 storm sewer pipe in Tower Road. Construction of that storm sewer pipe has started.

The site will be developed in four units. Unit 1 will be the south quarter of The Towers and will be abutting Tower Road. Unit 2 will be the quarter of the subdivision north of Unit 1, Unit 3 will be the next quarter, and Unit 4 will be the quarter closest to and abutting Eucariz.

The proposed full development comprises an interior development of 154 lots, as shown on Sheet 2. SAD 222 is expected to complete Tower Road's storm sewer pipe before construction of The Towers Subdivision commences. The southernmost lots (Unit 1) will be developed initially. The temporary storm water retention ponds located on the south side of the development will no longer be needed because of the completion of the Tower Road storm drain.

DRAINAGE CONCEPT FOR THE SITE

Runoff in the area of this development flows naturally from the west to the east. Areas upstream to the west and northwest of the site are intercepted by the existing and proposed storm drainage projects in 94th Street.

Sheet 2 shows the Grading and Drainage Plan for The Towers. Runoff from the site will follow the general flow direction to the south and the east. Mountable curb will be used throughout the development, with transitions where necessary from rolled curb to standard curb and gutter as flow rates require. The amount of flow in the gutters will not exceed the top of curb and the energy grade line will not exceed 0.2 feet above the curb.

Runoff generated on the development will flow from the west to the east in gutters, then south in 90th Street to storm sewer inlets and out of the development to Tower Road in a storm sewer pipe. The storm sewer pipe will connect to a 42-inch SAD 222 stub out to 90th and then to the proposed 72-inch storm drain trunk along Tower Road provided for within SAD 222. The Master Drainage plan on Sheet 1 in the folder provides a schematic of the SAD storm drain layout.

Basin boundaries along the west side of Sky Tower Street are drawn on the Grading and Drainage Plan (Sheet 2), to reflect the gutter flow. Calculations in the appendix indicate the street capacity with mountable curb is enough to carry the runoff of approximately 41 lots.

OFFSITE FLOWS HANDLING AND DISCHARGE

The Towers Subdivision accepts no water from offsite. A proposed storm drain in Eucariz Avenue will accept runoff from the proposed Eldorado North Subdivision on both sides of Eucariz Avenue. Flows from north of Eucariz Avenue will ultimately go to the east in a storm sewer pipe to the SAD 222 storm drain trunk at 86th Street. A storm sewer pipe is installed north of Tower Road in 94th Street and is being extended north of Eucariz Avenue to collect all water along 94th street and areas west to 98th Street.

ONSITE FLOWS HANDLING AND DISCHARGE

Table A provides hydrologic data for the drainage area within the development for existing and full development conditions. Mountable curb and gutter will be used in all but the downstream portions of 90th and of Eiffel. Street slopes will be from 0.7% to 3.3%. Street capacities are presented in Table B of this report. All of the street runoff will be picked up by inlets at the intersection of Eiffel and 90th and in 90th before Tower. There will be type A inlets on each side of Eiffel and each side of 90th, the A's will be followed by B's on 90th for a total of 4 type A inlets and 2 B inlets.

These will be connected to the SAD 222 42-inch storm drain pipe stub to 90th via 18 and 24-inch connector pipes. The alignment of the storm sewer pipe is south along 90th Street. The 42-inch pipe will connect to a 72-inch storm drain trunk under construction in Tower Road as provided for within SAD 222. Sheet 1 in the folder provides a schematic of the SAD storm drain layout.

IMPACTS AND REQUIREMENTS

Runoff from the undeveloped site was 30 cfs for the 100-year event. Land treatment will be changed from mostly uncompacted to mostly impervious. A total of 84 cfs will flow off the site from the developed project. SAD 222 structures have been designed to accept a 90 cfs flow from the fully developed subdivision.

No FEMA Flood Zone A areas are mapped on the site on the existing FEMA Map No. 35001C0328D, panel 328 of 825, dated September 20, 1996.

GRADING PLAN

The grading plan shows:

- 1) existing grades indicated by spot elevations and contours at one foot intervals.
- 2) proposed grades are indicated by spot elevations and approximate street slopes.
- 3) continuity between existing and proposed grades at the property boundary.

CALCULATIONS

The calculations contained herein analyze both the existing and developed conditions for the 10-year and 100-year, 6-hour rainfall. The Procedure for 40-Acre and Smaller Basins, as set forth in the revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated 1997, has been used to quantify the peak rate of discharge and volume of runoff generated.

Table A provides a summary of hydrologic data for the drainage area for existing and full development conditions. Street flows presented in Table B are used to determine the size of the inlets and the storm drain pipe. The computed half street capacities are also presented in Table B

SUMMARY

The analyses contained herein support the following conditions:

- 1. The storm drainage system on site will convey runoff expected from the 100-year, 6-hour rainfall event in the proposed development condition.
- 2. The proposed system provides a connection to proposed downstream facilities.
- 3. The proposed system has no impact on downstream flood zones.
- 4. The Towers Subdivision accepts no water from offsite.
- 5. The downstream streets and storm drainage systems are owned, operated and maintained by the city Public Works Department.

•

TABLE A

BASIN RUNOFF SUMMARY

EXISTING CONDITION HYDROLOGY --- THE TOWERS

		Land Treatment		Qpeal	c (cfs)	V	olume (ac-	·ft)		
Basin	Area (ac)	%A	%B	%C	%D	10-yr	100-yr	10-yr	100-yr	100-yr
,		70A	7015	70C	701)	6-	hr	6-	hr	10-day
1	5.10	100	0	0	0	1.2	6.6	0.034	0.187	0.187
2	4.46	100	0	0	0	1.1	5.8	0.030	0.164	0.164
3	4.88	100	0	0	0	1.2	6.3	0.033	0.179	0.179
4	8.81	100	0	0	0	2.1	11.4	0.059	0.323	0.323
	23.25									
		TOT	4L			5.6	30.0	0.155	0.853	0.853

FULLY DEVELOPED CONDITION HYDROLOGY --- THE TOWERS

- ,,			Land Tr	reatment		Qpeal	c (cfs)	V	olume (ac-	-ft)
Basin	Area (ac)	%A	%B	%C	%D	10-yr	100-yr	10-yr	100-yr	100-yr
		70 <i>P</i> 1	7015	700	701	6-	hr	6-	hr	10-day
1	5.10	0	20	20	60	11.1	18.4	0.372	0.643	1.018
2	4.46	0	20	20	60	9.7	16.1	0.326	0.563	0.891
3	4.88	0	20	20	60	10.7	17.6	0.356	0.616	0.974
4	8.81	0	20	20	60	19.2	31.7	0.643	1.112	1.759
	23.25					50.8	83.7	1.697	2.933	4.642

^{*} City of Albuquerque Development Process Manual, Volume 1, 1997 Revision, pages 22-7 to 22-16

TABLE A4

PROJECT:

THE TOWERS --- Estimated Street Flows

DRAINAGE:

SINGLE LOT

CONDITION:

Developed

PART A --- Procedure for 40 Acre and Smaller Basins*

Input

Zone	(x)_
1	X
2	3 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
3	资益 :
4	

Area (ac) 0.14463 Land Treatment (%)

A 0 60.00

C 20.00

D 60.00

Output

* City of Albuquerque Development Process Manual, Volume 1, 1997 Revision, pages 22-7 to 22-16

FT FT

FT SQ AC

LOT SIZE

45

140

6300 0.144628



TABLE B

HALF ST	REET CAP	ACIIY				
THE TOV	VERS		. <u>-</u>		. ·	
Curb-Curb	<u>-</u>	Q100/lot = 0.5	cfs			
28' wide		•			- 	
			rolle	d curb	std.	Curb
Slope	Q to C.L,	No. of trib	Q to TC	No. of trib	Q to TC	No. of trib
(ft/ft)	(cfs)	lots/half w	(cfs)	lots/full st	(cfs)	lots/full st
0.008	5.4	11,	8.9	35	46.2	185
0.010	6.0	· ·	9.9	40	53.3	213
0.012	6.6	13	10.9	44	58.4	234
0.020	8.5	17	14.0	56	73.0	292 .
0.030	10.4	20	17.2	(69)	92.3	369

INLET SIZ	ZING				
·			Single	Double B	Double C
Slope	Q100	Depth	Inlet Cap.	Inlet Cap.	Inlet Cap.
(ft/ft)	(cfs)	(ft)	(cfs)	(cfs)	(cfs)
		•			
0.012	52/2	0.46	5.5		
0.030	32/2	0.32	3.8		
0.007	20.5	0.47	4.5	7	4.8
Sag	32			32	

PIPE

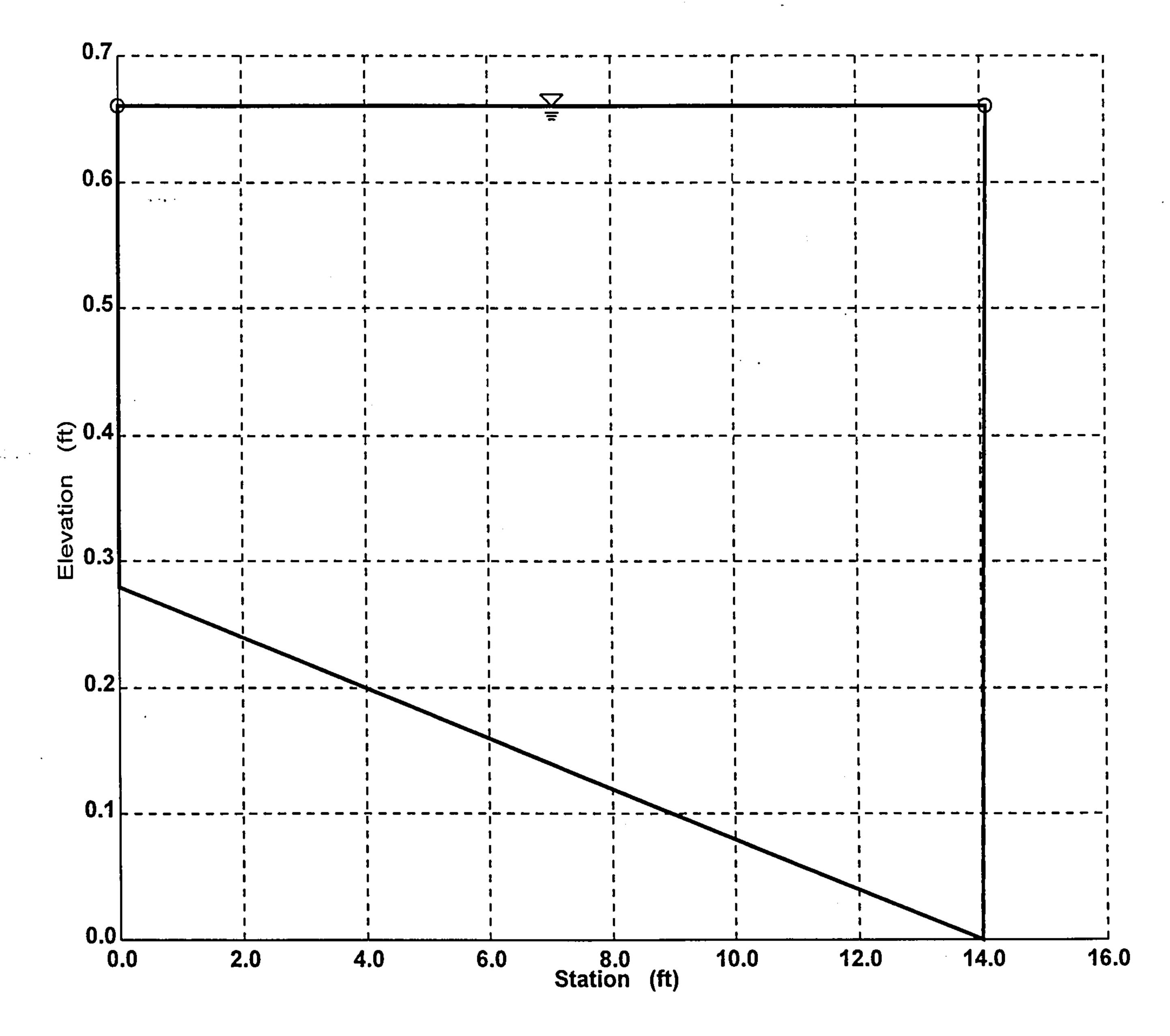
	Pipe Slope (%)	Pipe Capacity (3) (cfs)
18 Inch Storm Drain	0.7	8.7
•	3.3	19.0
· 	5	23.5
24 Inch Storm Drain	0.7	18.9
•	3.3	41.0
	5	50.5

- (1) See Sheets 1 & 2 of Flow Mater 37 cfs minimum
- (2) Based on DPM Plate 22.3 D-1 for 32ft. street; d=0.6ft. (0.67ft. available)
- (3) Manning Formula for Circular Channel

Cross Section Cross Section for Irregular Channel

Project Descript	on
Project File	d:\haestad\fmw\eldopark.fm2
Worksheet	half witdth
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Section Data	•	
Wtd. Mannings Coefficient	0.013	
Channel Slope	0.02000	00 ft/ft
Water Surface Elevation	0.66	ft
Discharge	73.04	cfs



PLATES

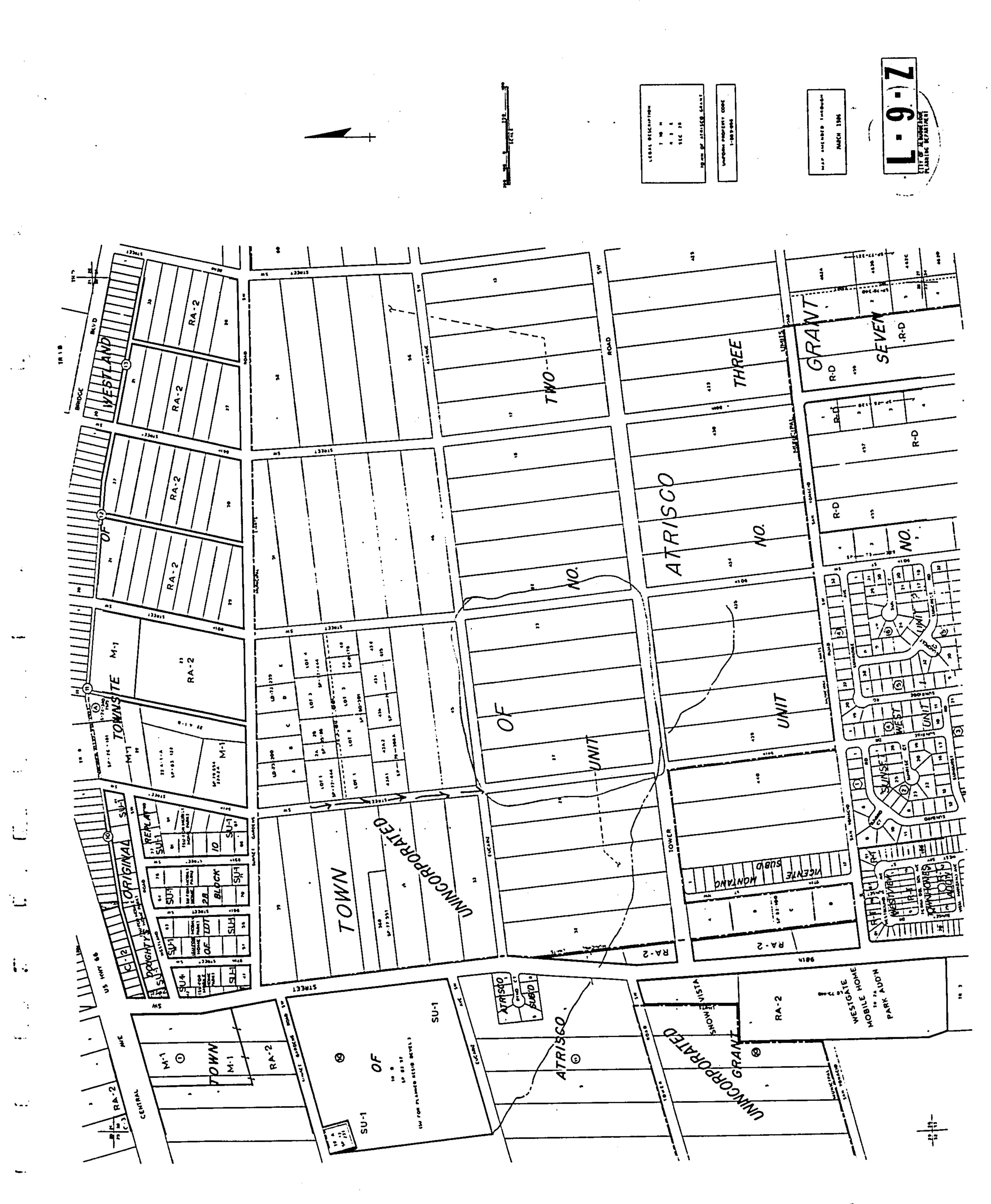


PLATE 1

GRATING CAPACITIES FOR TYPE 'A', 'C' and'D'

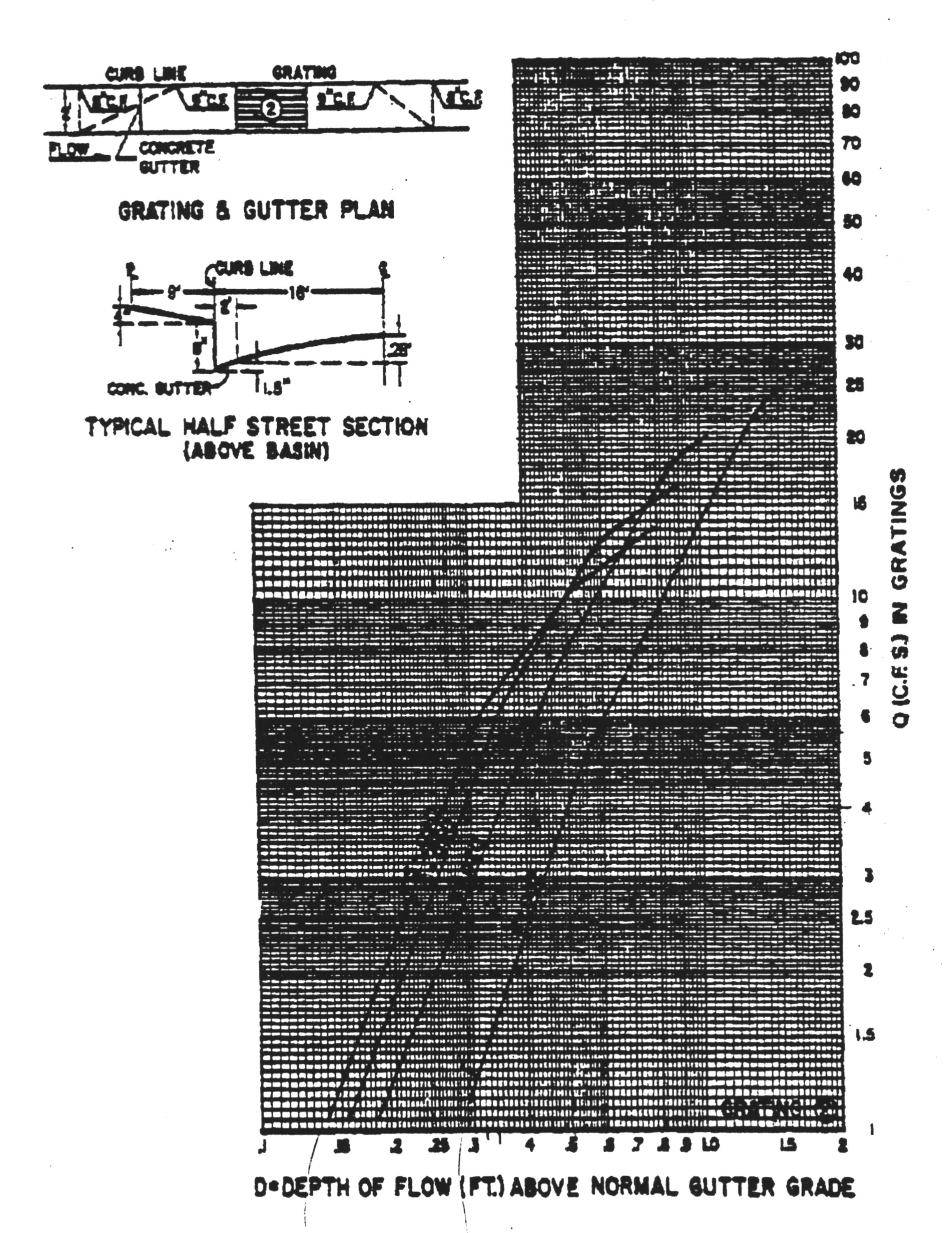


PLATE 22.3 D-5

0,

FOLDER

SECOND JUDICIAL DISTRICT COURT COUNTY OF BERNALILLO STATE OF NEW MEXICO

JASON DOMINGUEZ, CHRIS ROMERO, and KEVIN MICHAUD, Individually and on Behalf of All Others Similarly Situated,

Plaintiffs,

VS.

No. CV-2005-08132

FULLER HOMES, INC., a New Mexico business corporation.

Defendant

and

FULLER HOMES, INC.,

Third Party Plaintiff,

VS.

TEN WEST, LLC,

Third Party Defendant.

AFFIDAVIT OF BRADLEY L. BINGHAM

Having been first duly sworn upon his oath, Bradley L. Bingham, PE, deposes and states as follows:

- 1. I am over the age of 18 years and otherwise competent to state the following based on my personal knowledge.
 - 2. I am a City Hydrologist with the City of Albuquerque.
- 3. In my capacity as a City Hydrologist, I reviewed and approved the proposed grading and drainage plan for the Towers Subdivision on or about December 17, 2001. A copy of the approved grading and drainage plan is attached to this affidavit as Appendix A. The

approved plan does specifically show required retaining wall, made from CMU, on the north and south sides of the entire subdivision but not between individual lots. It also shows backyard slopes on half of the lots. On 10/1/03, the developer's engineer certified the grading plan of Units 3 and 4 and submitted to the City for approval. The City approved the certification on 10/6/03, relying on the engineer's assertion that the grading was substantially compliant with the plan.

- 4. In 2004, I was contacted with respect to a drainage problem on certain lots within the Towers Subdivision. On October 24, 2004, I wrote a letter to Wade Wingfield of Fuller Homes, among other people, regarding grading and drainage at the Towers Subdivision, which is attached to this affidavit as Appendix B.
- 5. In my letter, I wrote that the lots in the Towers Subdivision should have been separated by solid walls made of CMU or concrete. I met with Mr. Wingfield afterwards on site and recanted to him that the walls did not need to be CMU or concrete but they needed to fully retain soil, possibly by adding an impervious liner of some kind.

Further affiant sayeth not.

Bradley L. Bingham	

STATE OF NEW MEXICO COUNTY OF BERNALILLO

This instrument was acknowledged before me on March ___, 2006, by Bradley L. Bingham.

(Seal)	Notary Public	
•	My commission expires:	



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 18, 2001

June Page, PE Resource Technology, Inc. 5501 Jefferson Blvd, NE Ste 200 Albuquerque, NM 87109

Re: The Towers Subdivisions Drainage Report

Engineer's Stamp 12-17-01, (L9/D27A)

Dear Ms. Page,

Based on your information contained in your submittal dated 12-17-01, the above referenced plan is approved for Preliminary Plat action by the DRB. Once that board has approved the subdivision, please submit mylar copies of the grading plan for signature in order to obtain a Grading Permit.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE

Sr. Engineer, PWD

Development and Building Services

C: file

SECOND JUDICIAL DISTRICT COURT COUNTY OF BERNALILLO STATE OF NEW MEXICO

JASON DOMINGUEZ, CHRIS ROMERO, and KEVIN MICHAUD, Individually and on Behalf of All Others Similarly Situated,

Plaintiffs,

VS.

No. CV-2005-08132

FULLER HOMES, INC., a New Mexico business corporation.

Defendant

and

FULLER HOMES, INC.,

Third Party Plaintiff,

VS.

TEN WEST, LLC,

Third Party Defendant.

AFFIDAVIT OF BRADLEY L. BINGHAM

Having been first duly sworn upon his oath, Bradley L. Bingham deposes and states as follows:

- 1. I am over the age of 18 years and otherwise competent to state the following based on my personal knowledge.
 - 2. I am a City Hydrologist with the City of Albuquerque.
- 3. In my capacity as City Hydrologist, I reviewed and approved the proposed grading and drainage plan for the Towers Subdivision on or about December 17, 2001. A copy of the approved grading and drainage plan is attached to this affidavit as Appendix A.

4. In 2004, I was contacted with respect to perceived drainage problems on certain
lots within the Towers Subdivision. On October 24, 2004, I wrote a letter to Wade Wingfield of
Fuller Homes, among other people, regarding grading and drainage at the Towers Subdivision,
which is attached to this affidavit as Appendix B.
5. In my letter, I wrote that the residences in the Towers Subdivision should have
been separated by solid walls made of CMU or concrete. I have since visited the site, and
reviewed the approved grading and drainage plan for the Towers Subdivision. In fact, they approved grading and drainage plan for Towers did not require solid walls made of CMU or
concrete between the residences; rather, the developer was responsible for grading the lots
substantially to the approved elevations without any requirement solid walls between the lots.
6. As the lots in the Towers Subdivision were developed and sold to consumers, they
were in compliance with the approved grading and drainage plan.
Further affiant sayeth not.
Bradley L. Bingham
STATE OF NEW MEXICO
COUNTY OF BERNALILLO
This instrument was acknowledged before me on February, 2006, by Bradley L. Bingham.
(See 1) Notery Dyblie
(Seal) Notary Public
My commission expires:

K:\dox\client\81715\112\W0557001.DOC

TEN WEST, L.L.C. 333 Lomas NE Albuquerque, NM 87102 (505) 998-0301

October 2, 2003

Brad Bingham
City of Albuquerque
600 Second Street NW
Albuquerque, NM 87102

RE: The Towers, Units 3 & 4

Dear Brad:

Attached please find sheet 4, the Grade and Drainage for The Towers Subdivision, Units 3 and 4 reflecting the engineer's certification. Please prepare the acceptance/approval letter Grading and Drainage Certification Release of Financial Guarantee as soon as possible.

If you have any questions, please call me at 998-0301.

Respectfully,

Franklin E. Wilson Managing Partner



City of Albuquerque P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 6, 2003

Gary Werner, P.E. Resource Technology 5501 Jefferson Suite 200 Albuquerque, NM 87109

Re: The Towers Subdivision Units 3 and 4, SIA/Financial Guarantee Release

Engineer's Stamp dated 6-11-03 (L9/D27A)

Certification dated 10-01-03

Dear Mr. Werner,

Based upon the information provided in your submittal dated 10-02-03, the above referenced certification is approved for release of SIA and Financial Guarantee.

If you have any questions, you can contact me at 924-3981.

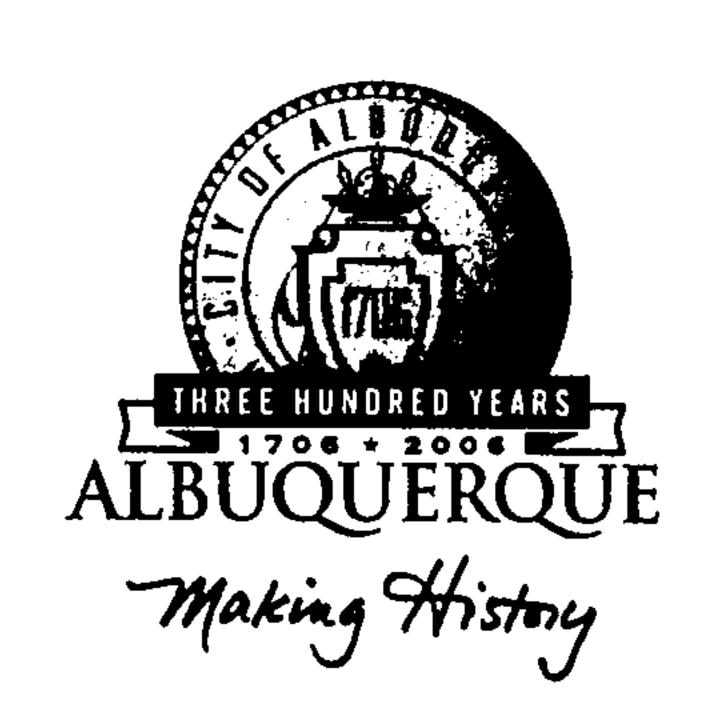
Vrictal D. Matro

Sincerely,

Engineering Associate, Planning Dept. Development and Building Services

C: Arlene Portillo, COA# 6799.82 file

CITY OF ALBUQUERQUE



October 25, 2004

Wade Wingfield Richard Fuller Homes 6260 Riverside Plaza Ln Albuquerque, NM 87120

Frank Wilson 333 Lomas Blvd NE Albuquerque, NM 87102

Gary Werner, PE Resource Technologies, Inc. 5501 Jefferson, Ste 120 Albuquerque, NM 87109

Re: **Towers Subdivision**

Dear Mr. Wingfield,

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Based upon many complaints from homeowners in this subdivision and my own site visit to this subdivision, I wish to forward my concerns. This subdivision was reviewed and approved by this office and certified by the design engineer. However, my approval was based on the inference that the necessary retaining walls would be solid (CMU or concrete). This solid retaining wall is required to ensure that all the lots drain to a street and not to the neighboring lot. In my site visit, I noticed that you are using treated landscaping timbers as the wall material or, in some cases, piling dirt against a cedar fence. These types of retaining walls do not keep runoff from draining from lot to lot and is contrary to the intent of the grading and drainage plan. After the recent rains, a fair amount of erosion was noticed on several properties and this problem will worsen on each storm event. I would like you to please contact my office to discuss this situation and possible remedies.

Thank you for your prompt attention to this matter. You can contact me at 924-3986.

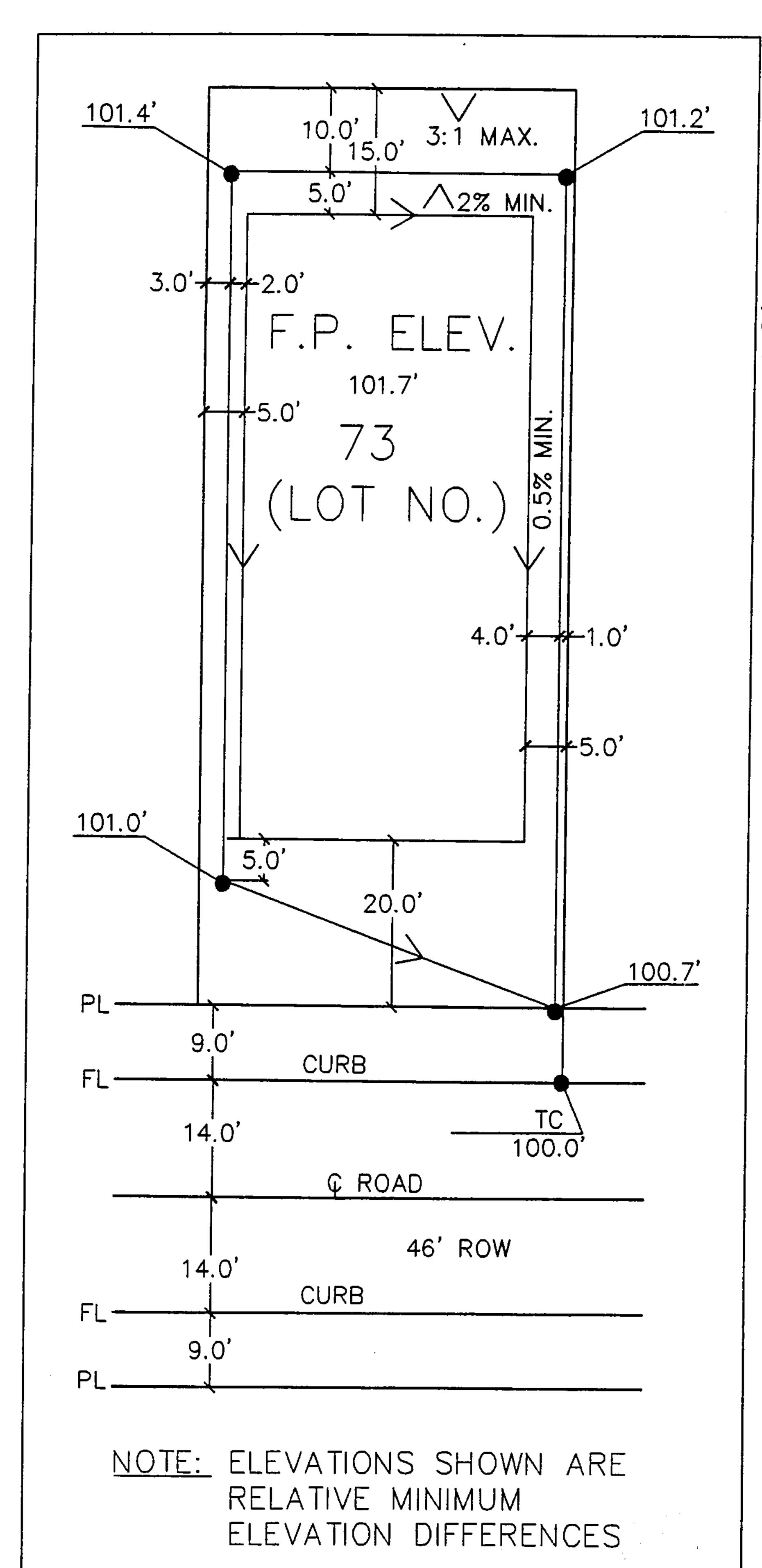
Sincerely,

Braelley L. Bingham, PE

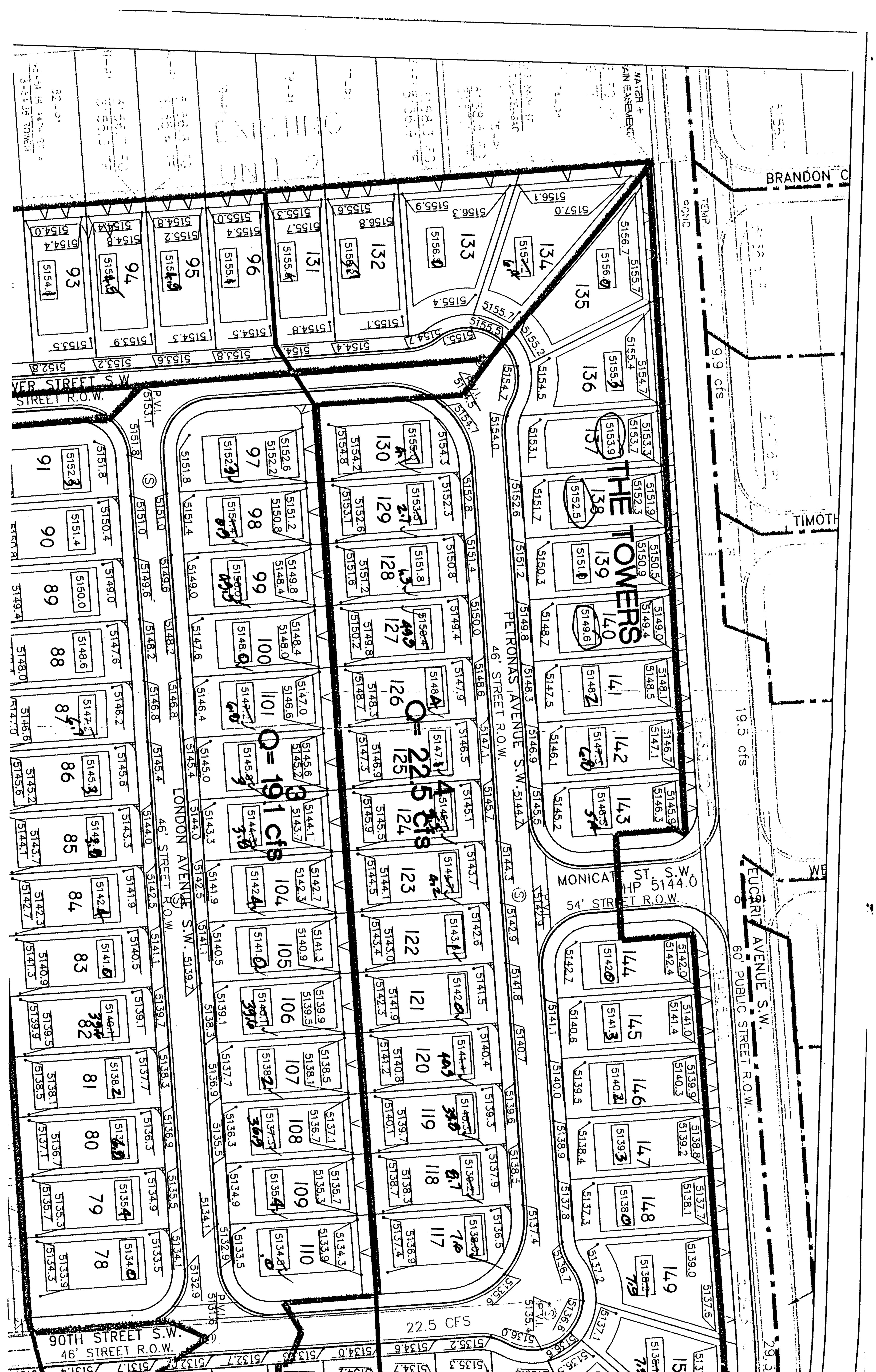
City Hydrologist

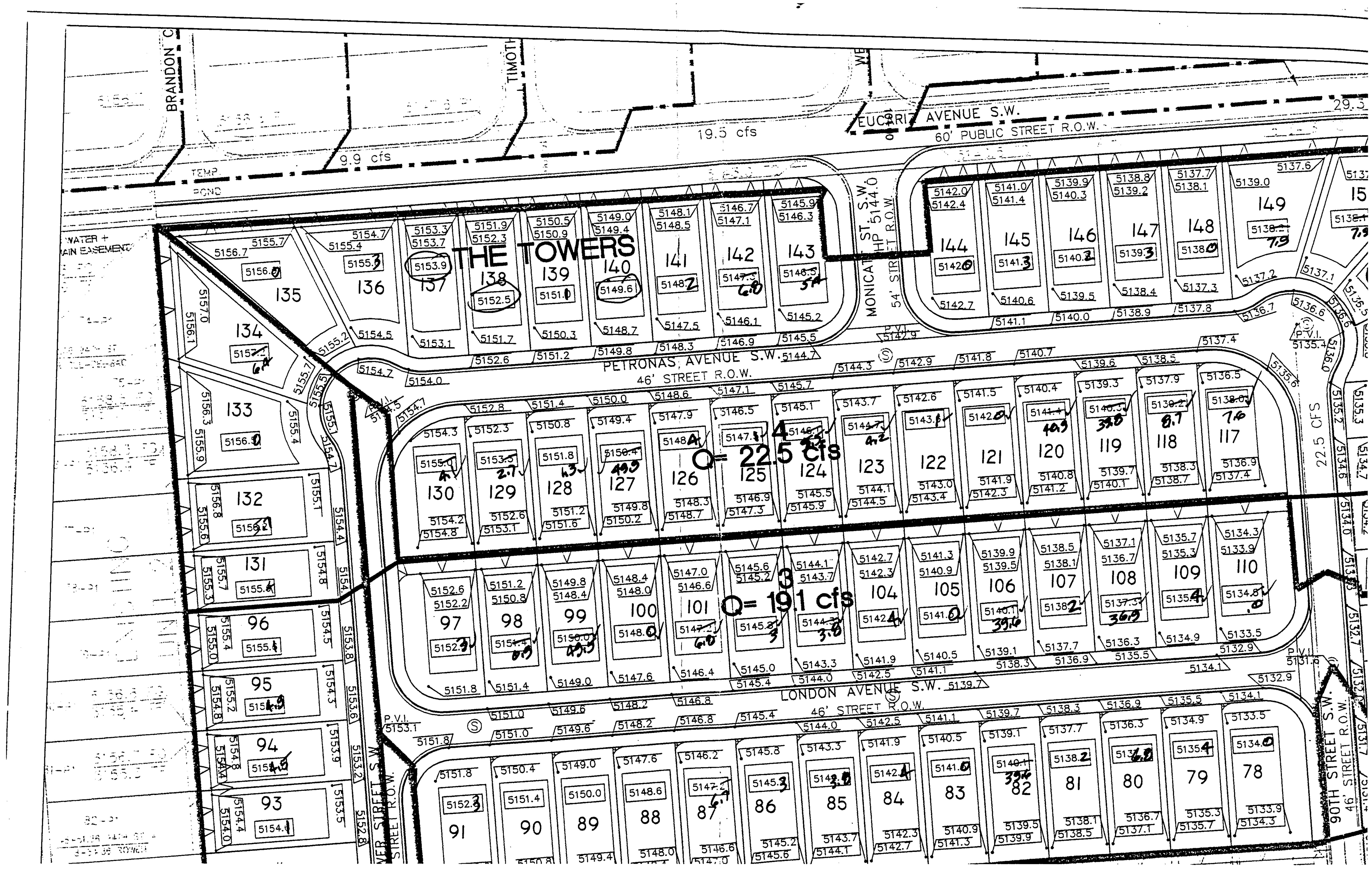
Richard Dineen, Planning AJ Carian, Mayor's Office Chris Romero, 9208 Petronas SW file

TYPE B. INLET SAG 5124.0 一名人口 (11/EPT 59)。 HP



A: We sue 500 42





DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

	City Project # 6799.81
PROJECT TITLE: 10WERS, 4nits 3.54 DRB #: 1000178 EPC#:	C/ty Project # 6799.81 ZONE MAP/DRG. FILE #: L-9 D27 WORK ORDER#:
LEGAL DESCRIPTION: Towers, Units 3 = 4 CITY ADDRESS:	
ENGINEERING FIRM: RESOURCE Technology ADDRESS: 5501 Jefferson, Suite 1/200	CONTACT: GARY Werner PHONE:
CITY, STATE: A/b. A/M	ZIP CODE: 87/09
OWNER: JEN West LLC	CONTACT: FRANK Wilson
ADDRESS: 333 LOMAS NE CITY, STATE: Albug. NM 87102	PHONE: <u>998-0301</u> ZIP CODE:
ARCHITECT:	CONTACT:
ADDRESS:CITY, STATE:	PHONE:ZIP CODE:
SURVEYOR: Surveys Southwest	
ADDRESS 33/Lomas NE	CONTACT: DAN GRANEY PHONE: 998-0303
CITY, STATE: A1649. NM 87/02	ZIP CODE:
CONTRACTOR: NEW Concepts ADDRESS: P.O. Box 9555	CONTACT: BURR DICKINSON PHONE: 452-8910
CITY, STATE: Albug. NM	ZIP CODE: 87/19
CHECK TYPE OF SUBMITTAL: DRAINAGE REPORT DRAINAGE PLAN CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) CLOMP/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEERS CERTIFICATION (TCL) ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) OTHER	CHECK TYPE OF APPROVAL SOUGHT: SIA / FINANCIAL GUARANTEE RELEASE 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 (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED: YES NO COPY PROVIDED	Louth Elle
DATE SUBMITTED: / U-2 - 03 BY: BY:	answerner_
Requests for approvals of Site Development Plans and/or Subdivise The particular nature, location and scope of the proposed development of the following levels of submittal may be required based or 1. Conceptual Grading and Drainage Plan: Required for 2. Drainage Plans: Required for building permits, grading 3. Drainage Report: Required for subdivisions containing	ment defines the degree of drainage derail 30ne of the following: r approval of Site Development-Plans greater than five to permits, paying permits and large derails.

more.

ALBUQUERQUE NEW MEXICO Frank Wilson Ten West LLC

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 10, 2002

Frank Wilson
Ten West LLC
333 Lomas NE
Albuquerque, New Mexico 87102

RE: TOWER SUBDIVISION UNIT 2

(L-9/D27A)

Acceptance of Engineers Certification and Release of Financial Guaranty

Dear Frank:

Based on the information provided the submittal dated 11/27/2002, the above referenced project can not be approved for Release of SIA and Finacial Guaranty at this time.

As per our phone conversation on 12/10/2002, the following items must be addressed in order to recommend the release of the financial guaranty for the above mentined project.

- On the Engineers Certification by Resource Technology, with the elimination of the retaining wall on Tower Road, asbuilt elevations need to be provided, as well as a more detailed exhibit showing the change in the grading pattern in the rear yards regarding the drainage flow pattern for lots 1-18 on Tower Ave.
- An SO19 permit was needed pertaining to the inlet in the drivepad at Eiffel Ave and 90th St; the contractor needs to obtain the permit, and have the City's Storm Drainage Maintenance Inspector approve the SO19 improvement.
- Since a different engineer was chosen to provide a grading and drainage plan for the SO19, this plan will also need to be certified by the Engineer.

When the above items have been addressed and submitted to our office, we will again review the submittal for Financial Guaranty release.

If I can be of further assistance, please feel free to contact me at 924-3981.

Sincerely,

Teresa A. Martin, P.E.

Hydrology Plan Checker

Development & Bldg. Ser. Division

PROJECT TITLE: The Towers Stubblioton Union Brb#:EPC#:	ZONE MAP/DRG. FILE #: L-9
UMO#EPC#:	WORK ORDER#: 6/97.81
LEGAL DESCRIPTION: GOT STILL CHOWN RA	
	1 (10 10)
ENGINEERING FIRM: NSOUTCL TICHNO 10943 ADDRESS: 5501 Lifferson NE #200	
CITY, STATE: AGO NH	PHONE: <u>243.7300</u> ZIP CODE: 57/09
OWNER: In Wast 110	
ADDRESS: 333 LONGS NE	CONTACT: <u>FIU/IC WIISON</u> PHONE: 998 (137)5
CITY, STATE: HBQ NM	ZIP CODE: 87/02
ARCHITECT: NAME OF THE PARTY OF	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
SURVEYOR: DILL DILLING	CONTACT: Win Gilleu
ADDRESS	PHONE: 998 1303. ZIP CODE: 87102
CONTRACTOR () MANAGET MA	
CONTRACTOR: VIU (UVIU) CONTRACTOR: ADDRESS:	CONTACT: OUN DICUNSON. PHONE: 4528910
CITY, STATE:	ZIP CODE:
CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT DRAINAGE PLAN	SIA / FINANCIAL GUARANTEE RELEASE
CONCEPTUAL GRADING & DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN EROSION CONTROL PLAN	S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
ENGINEER'S CERTIFICATION (HYDROLOGY)	SECTOR PLAN APPROVAL FINAL PLAT APPROVAL
CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL)	FOUNDATION PERMIT APPROVAL
ENGINEERS CERTIFICATION (TCL)	BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.)
ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) OTHER	CERTIFICATE OF OCCUPANCY (TEMP.)
	GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL
	WORK ORDER APPROVAL COLD TO TO TO
	OTHER (SPECIFY) D)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	
YES	
NO COPY PROVIDED	HYDROLOGY SECTION
	1
DATE SUBMITTED 1/21/02 BY:	Multu R Hamp
DATE SUBMITTED 1/1/02/1/02 BY:	LLWW_K_KUW)

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5)
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

TEN WEST L.L.C. 333 Lomas Blvd., N.E. Albuquerque, NM 87102 (505) 998-0305 / Fax 998-7974

chanes@swsurvey.com

November 27, 2002

Terri Martin
City of Albuquerque
Plaza Del Sol Bldg. 2nd Floor
Albuquerque, NM 87102

Re

The Towers Subdivision, Unit 2 / #6799.81

Dear Terri:

Attached please find pages 1 and 7, the Details sheets for The Towers Subdivision, Unit 2 reflecting the engineers certification. Please prepare the acceptance/approval letter for Grading and Drainage Certification for Release of Financial Guarantee as soon as possible.

If you have any questions, please give me a call.

Respectfully

Franklin E. Wilson Managing Partner

D) 国 G 国 T V 国 D) NOV 2 7 2002 NOV 2 ROLOGY SECTION



City of Albuquerque P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 18, 2001

June Page, PE Resource Technology, Inc. 5501 Jefferson Blvd, NE Ste 200 Albuquerque, NM 87109

Re: The Towers Subdivisions Drainage Report

Engineer's Stamp 12-14-01, (L9/D27A)

Dear Ms. Page,

Based on your information contained in your submittal dated 12-17-01, the above referenced plan is approved for Preliminary Plat action by the DRB. Once that board has approved the subdivision, please submit mylar copies of the grading plan for signature in order to obtain a Grading Permit.

If you have any questions, you can contact me at 924-3986.

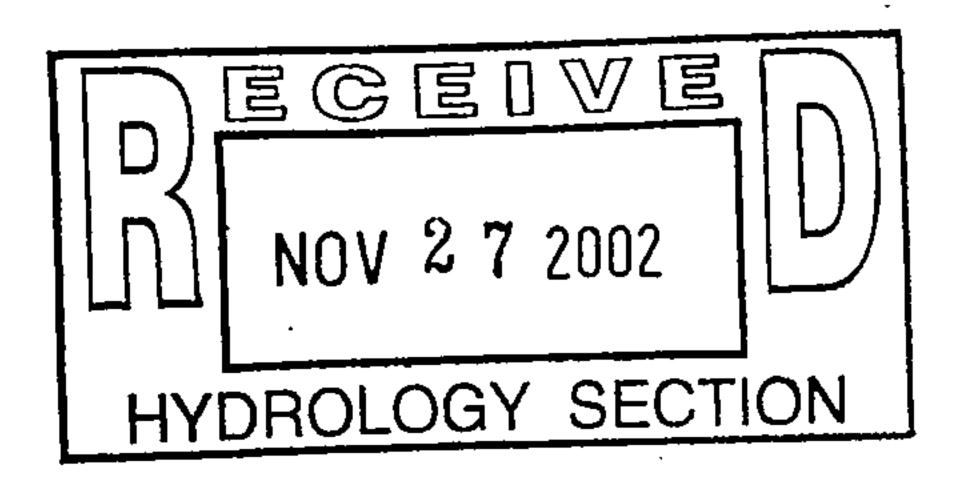
Sincerely,

Bradley L. Bingham, PE

Sr. Engineer, PWD

Development and Building Services

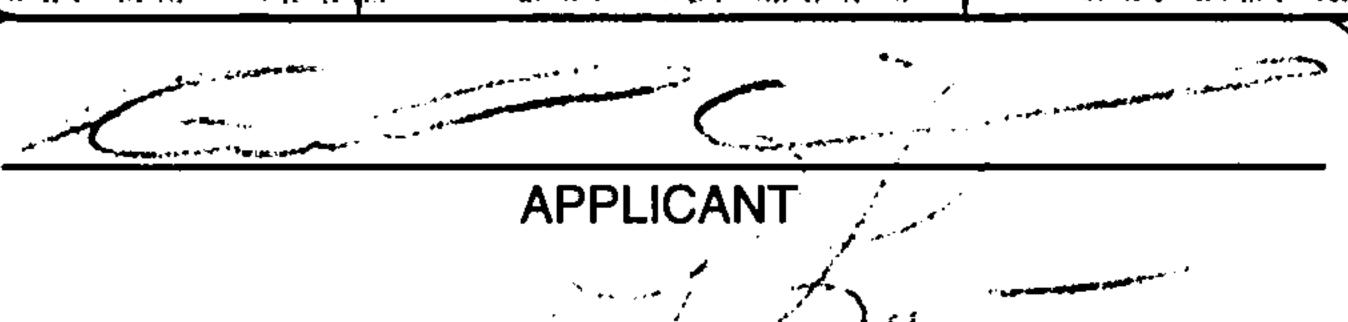
C: file



CITY OF ALBUQUERQUE ERMIT FOR EXCAVATION, CONSTRUCTION AND BARRICADING

2062029 AVILA, RICARDO PERMITNUMBER CONTRACTOR LICENSE PROJECT NUMBER 6403 ADDRESS PERMIT ISSUE DATE 10/11/2002 1248 ATRISCO S.W. BARRICADEDBY ALBUQUERQUE, MM 87105 BLUESTAKE 1181 873 °4033 2000 EIFFEL AV SW 000PAVINGBY EXCAVATION 443008 5810000 EX 42,00 SIDEWALK 443012-5810000 SW $O_{a}OO_{c}$ PERMITAND DETOUR PLAN COMMENTS DRIVEPAD 443011=5810000 $\mathbf{D}_{\mathbf{D}}$ \circ .. \circ SO MAY, LETTER ON FILE 0.00 $\mathbb{C}G$ GURB/GUITIER 448010-5810000 孫院 25.00 BARRICADING 443009 5810000 RS \circ . \circ RESTORATION 443017-5810000 TOTAL FEE 67.00

SIARIDAE	COMPLETION DATE	RERMITEXPRES	INSURANCEEXPIRES	BONDEXPIRES	ZONEATIAS
10/11/200	2 10/21/2002	10/21/2002	04/09/2003	12/31/2002	



ISSUED BY

VOID UNTIL VALIDATED BY CITY TREASURER

PERMITTEE AGREES TO ASSUME ALL LIABILITY, INCLUDING IDEMNIFYING, DEFENDING AND HOLDING THE CITY HARMLESS FOR ALL DAMAGES OR INJURY TO PERSONS OR PROPERTY RESULTING FROM PERMITTEE'S EXCAVATION AND/OR BARRICADE WORK. THIS PERMIT IS GRANTED IN CONSIDERATION OF PERMITTEE'S ASSUMING SAID LIABILITY AND IS APPROVED FOR THE WORK DESCRIBED ABOVE. IN ACCORDANCE WITH SECTION 6-5-2-1 ET SEQ. R.O. (1994), PERMITTEE AGREES TO COMPLY WITH ALL APPLICABLE CITY RULES, REGULATIONS AND ORDINANCES. AND WHEN EXCAVATING, TO PATCH OR PLATE PRIOR TO OPENING TO TRAFFIC IN ACCORDANCE WITH APPLICABLE RULES, REGULATIONS AND ORDINANCES. PLEASE CALL 768-2551 FOR ADDITIONAL INFORMATION.



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 9, 2002

Larry Read & Associates
4800-C Juan Tabo Blvd. NE
Albuquerque, New Mexico 87111

RE: Grading and Drainage Report for Tower Subdivision Inlet Replacement (L9-D27A)

Dated October 8, 2002 (9000 Eiffel au 5w)

Dear Mr. Read:

The above referenced drainage plan received October 9, 2002 is approved for SO #19 permit for construction in City Right-of-Way. Sign-off by City's field inspector is required for Hydrology approval.

If you have any questions please contact me at 924-3982.

Sincerely,

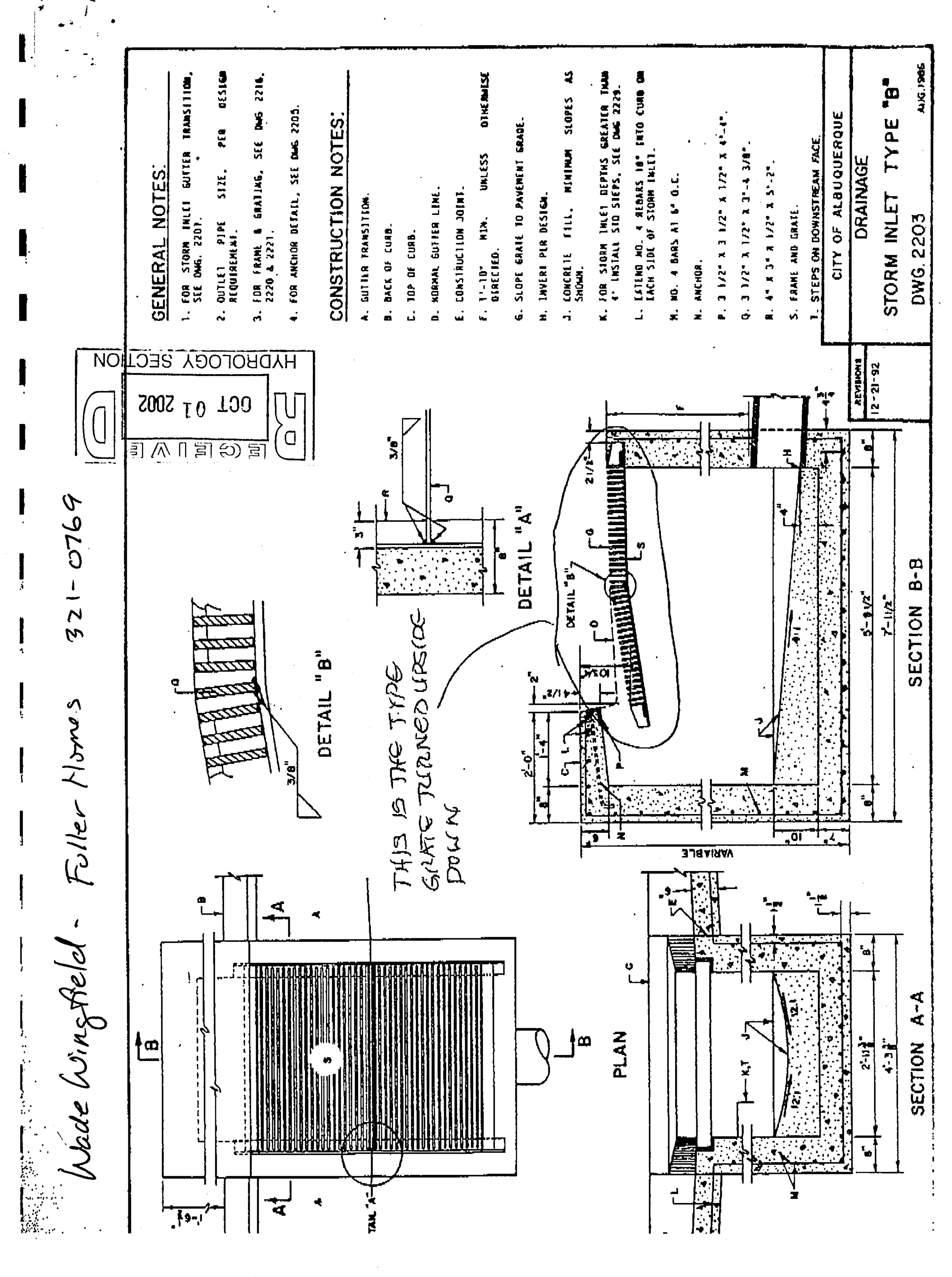
Carlos A. Montoya

City Floodplain Adm.

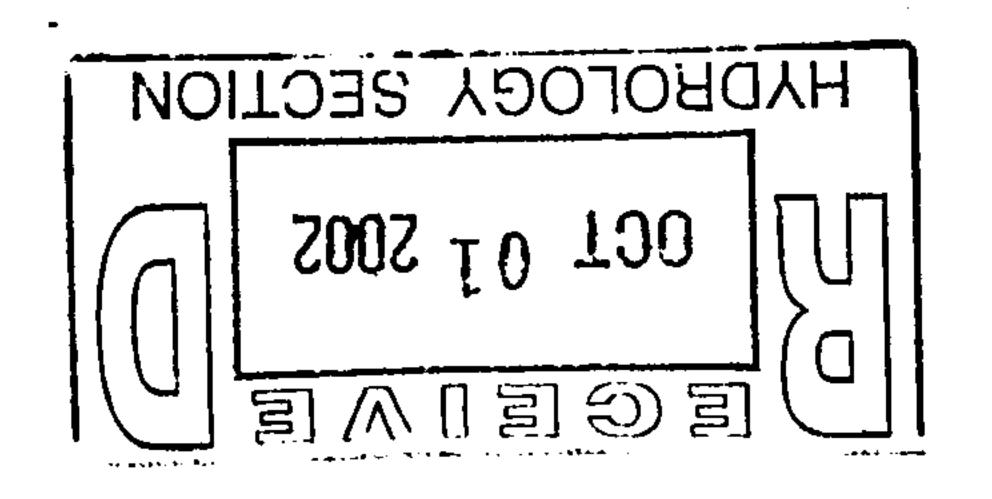
C: Pam Lujan, Excavation Permits

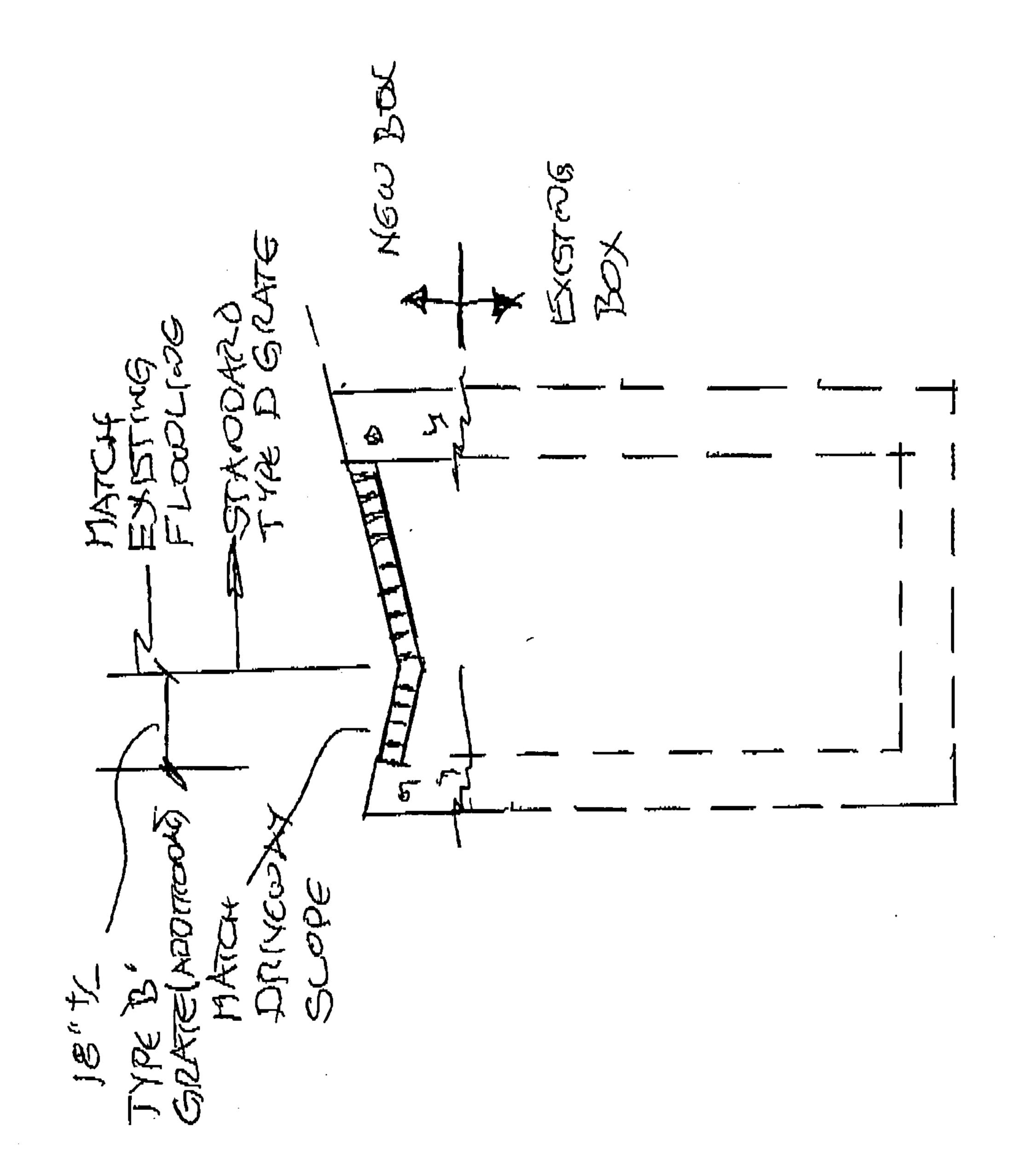
Matt Cline, Arroyo Maintenance w/attached plan

Randradicalor Malandor Malando

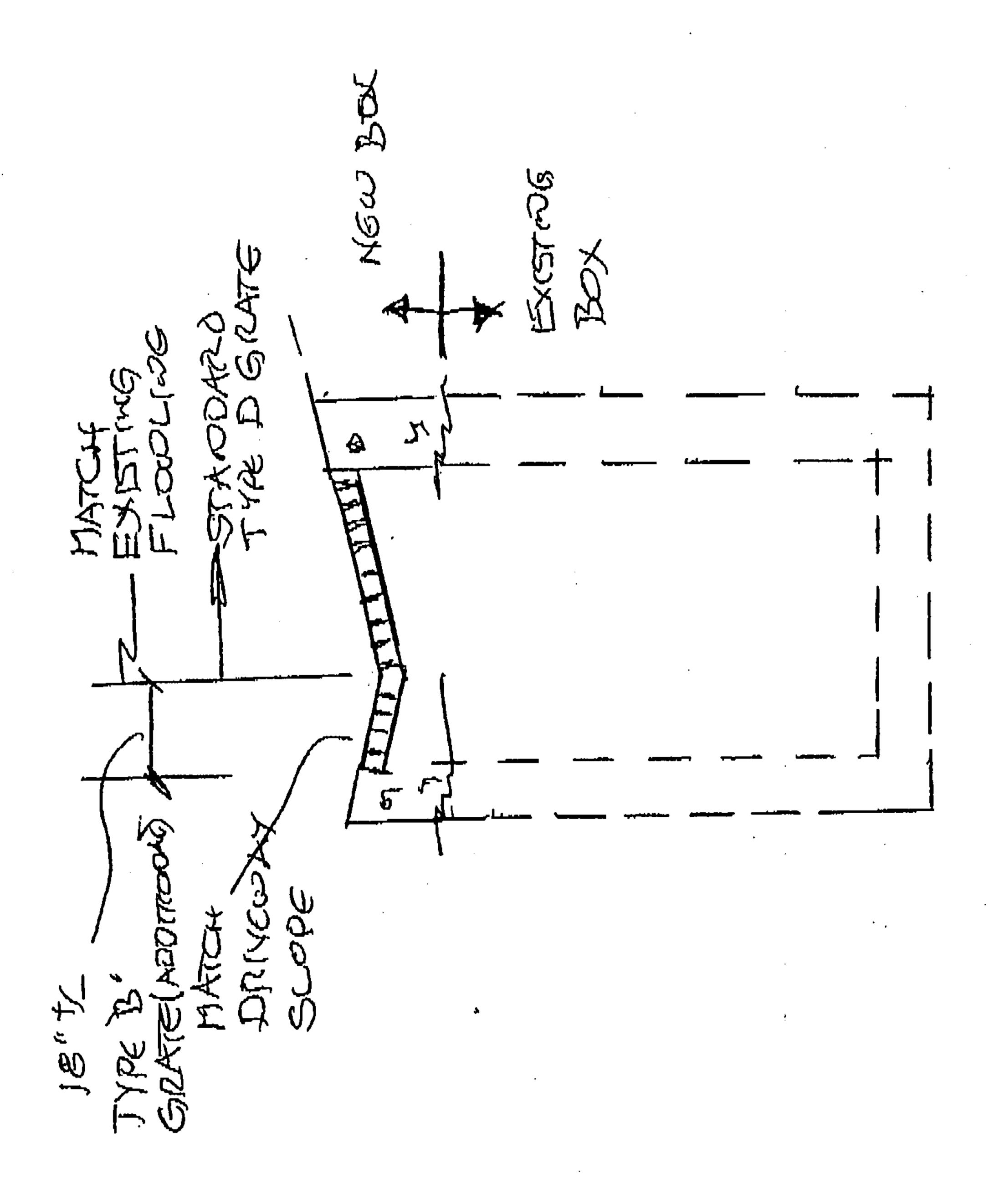


Jetimans H tol





5052378422





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 14, 2002

June Page, P.E. Resource Technology, Inc. 5501 Jefferson NE Suite 200 Albuquerque, New Mexico 87109

RE:

THE TOWERS SUBDIVISION UNIT 1

(L-9/D27A)

Engineers Certification

Engineers Stamp dated 12/14, 2001 Engineers Certification dated 5/6/2002

Dear Ms. Page:

Based upon the information provided in your Engineers Certification dated 5/6/2002, the above referenced plan is adequate to satisfy the Grading and Drainage Certification for the above referenced project.

However, prior to release of financial guaranty, SAD 222 will need to be completed and accepted by the City.

If you have any questions, please call me at 924-3981.

Sincerely,

Teresa A. Martin

Hydrology Plan Checker Public Works Department

240

C: Arlene Portillo, PWD – #679981
File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/11/2002)

PROJECT TITLE: The Towers Subdivision Unitiz	ONE MAP/DRG. FILE #: L-9/027A
- TOOL -	
LEGAL DESCRIPTION: LOTY YULL IN (OCT & /H-1 FINDING TOUR) CITY ADDRESS: 90+2-5+10415W & TOUR ROLLSW	Unit 2
ENGINEERING FIRM: KSOULICE LONG THE ADDRESS: 5001 Lifferson NE ALLOW CITY, STATE: ABO NIM	CONTACT: 110 POOL PHONE: 343-7300 ZIP CODE: 87/09
OWNER: IN WOS VE ADDRESS: 333 LOUGS VE CITY, STATE: ABO NM	CONTACT: Frank Wilson Chs Hancs PHONE: 998.0305 ZIP CODE: 87102
ARCHITECT: ADDRESS: CITY, STATE:	CONTACT:PHONE:ZIP CODE:
SURVEYOR: SURVEYOR: SURVEYOR: STATE: ADD NM	CONTACT: DON GIONEY PHONE: 098 0303 ZIP CODE: 07/02
CONTRACTOR: NWW WONDY THE ADDRESS: SOF POLOGION ROSE CITY, STATE: 400 NM	CONTACT: DU(T) CUISON PHONE: 452-8910 ZIP CODE: 87
DRAINAGE REPORT DRAINAGE PLAN CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEERS CERTIFICATION (TCL) ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) OTHER	CTYPE OF APPROVAL SOUGHT: SIA / FINANCIAL GUARANTEE RELEASE 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 (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED: YES NO COPY PROVIDED	MAY 0 7 2002
DATE SUBMITTED: 5/0/02 BY: WWW.	HYDROLOGY SECTION RAMES.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5)
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

TEN WEST L.L.C. 333 Lomas Blvd., N.E. Albuquerque, NM 87102 (505) 998-0305 / Fax 998-7974

May 6, 2002

Terri Martin
City of Albuquerque
Plaza Del Sol Bldg. 2nd Floor
Albuquerque, NM 87102

Re

The Towers Subdivision, Unit 1 / #6799.81

Dear Terri:

Attached please find pages 7, 15 and 17, the Details sheets for The Towers Subdivision, Unit 1 reflecting the engineers certification. Please prepare the acceptance/approval letter for Grading and Drainage Certification for Release of Financial Guarantee as soon as possible. If you have any questions, please give me a call.

Respectfully

Franklin E. Wilson Managing Partner

MAY 07 2002

HYDROLOGY SECTION



City of Albuquerque P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

1

December 18, 2001

June Page, PE Resource Technology, Inc. 5501 Jefferson Blvd, NE Ste 200 Albuquerque, NM 87109

Re: The Towers Subdivisions Drainage Report

Engineer's Stamp 12-14-01, (L9/D27A)

Dear Ms. Page,

Based on your information contained in your submittal dated 12-17-01, the above referenced plan is approved for Preliminary Plat action by the DRB. Once that board has approved the subdivision, please submit mylar copies of the grading plan for signature in order to obtain a Grading Permit.

If you have any questions, you can contact me at 924-3986.

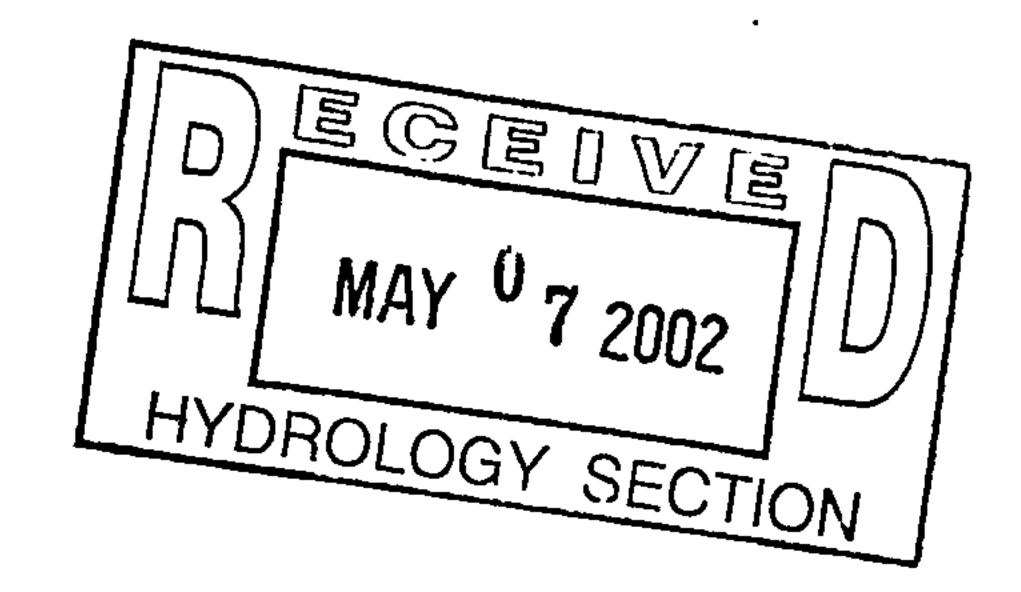
Sincerely,

Bradley L. Bingham, PE

Sr. Engineer, PWD

Development and Building Services

C: file





P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 17, 2002

June Page, P.E. Resource Technology, Inc. 5501 Jefferson NE Suite 200 Albuquerque, New Mexico 87109

Larry Read, P.E.
Larry Read & Assoc.
4800-C Juan Tabo Blvd NE
Albuquerque, New Mexico 87111

RE: THE TOWERS SUBDIVISION UNIT 2

(L-9/D27A)

Engineers Certification for Release of Financial Guaranty

Engineers Stamps dated 12/14/2001 and 10/8/2002

Engineers Certifications dated 11/27/2002 and 12/16/2002

Dear June and Larry:

Based upon the information provided in your Engineers Certification submittals dated 11/27/2002 and 12/16/2002, and also based upon the approval of the SO19 by the City's Storm Drainage Maintenance Inspector, the above referenced plan is adequate to satisfy the Grading and Drainage Certification for Release of Financial Guaranty.

If you have any questions, please call me at 924-3981.

Sincerely,

Teresa A. Martin

Hydrology Plan Checker

Development & Bldg. Ser. Division

c: Arlene Portillo, COA--Project # 679981

File



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 9, 2002

Larry Read & Associates
4800-C Juan Tabo Blvd. NE
Albuquerque, New Mexico 87111

RE: Grading and Drainage Report for Tower Subdivision Inlet Replacement (L9-D27A)

Dated October 8, 2002

Dear Mr. Read:

The above referenced drainage plan received October 9, 2002 is approved for SO #19 permit for construction in City Right-of-Way. Sign-off by City's field inspector is required for Hydrology approval.

If you have any questions please contact me at 924-3982.

Sincerely,

Carlos A. Montoya

City Floodplain Adm.

C: Pam Lujan, Excavation Permits
Matt Cline, Arroyo Maintenance w/attached plan



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 30, 2002

Larry Read & Associates
4800-C Juan Tabo Blvd. NE
Albuquerque, New Mexico 87111

RE: Grading and Drainage Report for Tower Subdivision Inlet Replacement (L9-D27A)

Dated October 8, 2002

Dear Mr. Read:

We have different submittals by different individuals for this project. We have a submittal on our list, which was received September 26, 2002, which had not been reviewed by the City. Obviously we have moved on from this submittal. I do want to comment on a field visit that I made to the site.

The lateral connecting the "A" inlet and the modified "D" inlet is at a different elevation than was shown in the drawing and the material of the pipe is different. These changes were made in the field, but they should be as built.

If you have any questions please contact me at 924-3982.

Sincerely,

Carlos A. Montoya

City Floodplain Adm.

C: Matt Cline, Arroyo Maintenance



P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 12, 2001

June Page, PE Resource Technology, Inc. 1720-B Randolph SE Albuquerque, NM 87106

Re: The Towers Subdivisions Drainage Report Engineer's Stamp 10-16-01, (L9/D27A)

Dear Ms. Page,

Based on your information contained in your submittal dated 10-16-01, the above referenced plan cannot be approved for Preliminary Plat until the following comments are addressed.

- Please include the basin map for Basins 1-4.
- Is there any offsite runoff entering Eucariz? Please quantify this on your grading plan.
- You should include design elevations of Tower Rd. from SAD 222.
- The grading plan is very sparse. At the Preliminary Plat stage in development, the grading plan should be complete enough to ascertain if and where retaining walls are needed, and where (and at what gradient) slopes are required and should have a typical lot-grading scheme. Essentially, it will need to be constructible since this is the plan you will be certifying for release of the financial guarantee. If you have any questions about the level of completeness of a grading plan, please consult the DPM, pg. 22-176.

If you have any questions about my comments, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE Sr. Engineer, Hydrology

C: file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV. 1/11/2002) PROJECT TITLE: Tower Suddivision ZONE MAP/DRG. FILE #:_ DRB #: WORK ORDER#:_ LEGAL DESCRIPTION: CITY ADDRESS: 9000 NGINEERING FIRM: 0111 ADDRESS: 4800-(CITY, STATE: ALL PHONE: ZIP CODE: **OWNER:** 1/0-nes ADDRESS: CONTACT: ida de 64BY Anbe-CITY, STATE: PHONE: 12/ ZIP CODE: ARCHITECT: ADDRESS: CONTACT: CITY, STATE: PHONE: ZIP CODE: SURVEYOR: ADDRESS CONTACT:_ CITY, STATE: PHONE:_ ZIP CODE: CONTRACTOR: ADDRESS: CONTACT: CITY, STATE: 2/1 PHONE: ZIP CODE: CHECK TYPE OF SUBMITTAL: CHECK TYPE OF APPROVAL SOUGHT: DRAINAGE REPORT SIA / FINANCIAL GUARANTEE RELEASE DRAINAGE PLAN PRELIMINARY PLAT APPROVAL CONCEPTUAL GRADING & DRAINAGE PLAN S. DEV. PLAN FOR SUB'D. APPROVAL GRADING PLAN S. DEV. PLAN FOR BLDG. PERMIT APPROVAL EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) ____ SECTOR PLAN APPROVAL FINAL PLAT APPROVAL CLOMR/LOMR FOUNDATION PERMIT APPROVAL TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEERS CERTIFICATION (TCL) BUILDING PERMIT APPROVAL ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) ____ CERTIFICATE OF OCCUPANCY (PERM.) ____ CERTIFICATE OF OCCUPANCY (TEMP.) OTHER GRADING PERMIT APPROVAL ____ PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)___ 宣(G)国门V区 WAS A PRE-DESIGN CONFERENCE ATTENDED: YES SEP 26 2002 NO COPY PROVIDED

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

DATE SUBMITTED: 7-26-01

- 1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five
- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or

HYDROLOGY SECTION