

The modifications are effective as of the date shown above. The map panel(s) as listed above and as modified by this letter will be used for all flood insurance policies and renewals issued for your community.

The following table is a partial listing of existing and modified BFEs:

Location	Existing BFE (feet)*	Modified BFE (feet)*
Area located between approximately 250 feet east and approximately 500 feet east of Eubank Boulevard and between approximately 200 feet south and approximately 100 feet south of I-40	None	5,437

*Referenced to the National Geodetic Vertical Datum, rounded to the nearest whole foot

Public notification of the proposed modified BFEs will be given in the *Albuquerque Journal* on or about August 9 and August 16, 2000. A copy of this notification is enclosed. In addition, a notice of changes will be published in the *Federal Register*. Within 90 days of the second publication in the *Albuquerque Journal*, a citizen may request that FEMA reconsider the determination made by this LOMR. Any request for reconsideration must be based on scientific or technical data. All interested parties are on notice that, until the 90-day period elapses, the determination to modify the BFEs presented in this LOMR may itself be modified.

Because this LOMR will not be printed and distributed to primary users, such as local insurance agents and mortgage lenders, your community will serve as a repository for these new data. We encourage you to disseminate the information reflected by this LOMR throughout the community, so that interested persons, such as property owners, local insurance agents, and mortgage lenders, may benefit from the information. We also encourage you to prepare a related article for publication in your community's local newspaper. This article should describe the assistance that officials of your community will give to interested persons by providing these data and interpreting the NFIP maps.

We are processing a revised FIRM and Flood Insurance Study (FIS) report for Bernalillo County; therefore, we will not physically revise and republish the FIRM and FIS report for your community to incorporate the modifications made by this LOMR at this time. Preliminary copies of the revised FIRM and FIS report were submitted to your community for review on March 31, 1999. We will incorporate the modifications made by this LOMR into the revised FIRM and FIS report before they become effective.

This LOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the SFHA. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

If you have any questions regarding floodplain management regulations for your community or the NFIP in general, please contact the CCO for your community at the telephone number cited above. If you have any questions regarding this LOMR, please contact the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,



Katie Hayden, Program Specialist
Hazards Study Branch
Mitigation Directorate

For: Matthew B. Miller, P.E., Chief
Hazards Study Branch
Mitigation Directorate

Enclosures

cc: Ms. Susan M. Calongne, P.E.
City/County Floodplain Administrator
City of Albuquerque/Bernalillo County

Mr. Edward H. Martinez, P.E.
Principal Engineer
Zia Engineering and Environmental Consultants, Inc.

CHANGES ARE MADE IN DETERMINATIONS OF BASE FLOOD ELEVATIONS FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO UNDER THE NATIONAL FLOOD INSURANCE PROGRAM

On September 20, 1996, the Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in the City of Albuquerque, Bernalillo County, New Mexico, through issuance of a Flood Insurance Rate Map (FIRM). The Mitigation Directorate has determined that modification of the elevations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) for certain locations in this community is appropriate. The modified base flood elevations (BFEs) revise the FIRM for the community.

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

Hydrologic and hydraulic analyses were performed to incorporate the effects of placement of fill and grading associated with construction of HomeBase at Towne Park Plaza southeast of the intersection of Interstate Highway 40 and Eubank Boulevard and construction of a 48-inch-diameter culvert beneath Interstate Highway 40 approximately 1,020 feet east of Eubank Boulevard. This has resulted in a decrease in SFHA width for an approximately 500-foot-long by 400-foot-wide L-shaped area southeast of the intersection of Eubank Boulevard and Interstate Highway 40. A BFE was established for the SFHA located between approximately 250 feet east and approximately 500 feet east of Eubank Boulevard and between approximately 200 feet south and approximately 100 feet south of Interstate Highway 40. The aforementioned culvert contains the base flood that originates from the area east of the HomeBase development. The table below indicates existing and modified BFEs for selected locations cited above.

Location	Existing BFE (feet)*	Modified BFE (feet)*
Area located between approximately 250 feet east and approximately 500 feet east of Eubank Boulevard and between approximately 200 feet south and approximately 100 feet south of Interstate Highway 40	None	5,437

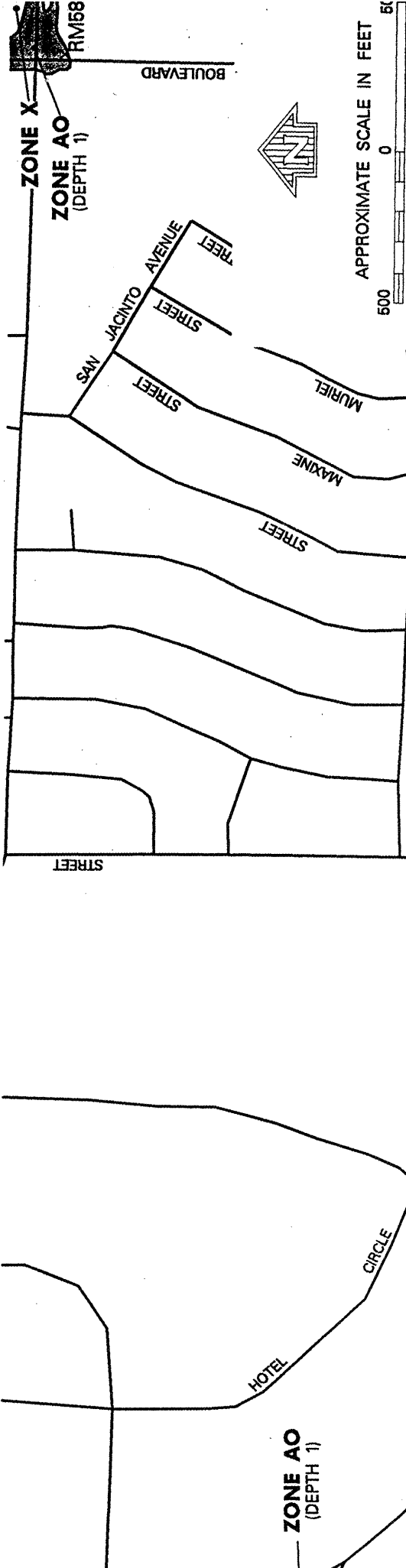
*National Geodetic Vertical Datum, rounded to nearest whole foot

Under the above-mentioned Acts of 1968 and 1973, the Mitigation Directorate must develop criteria for floodplain management. To participate in the National Flood Insurance Program (NFIP), the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Upon the second publication of notice of these changes in this newspaper, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the Mitigation Directorate reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data. All interested parties are on notice that until the 90-day period elapses, the Mitigation Directorate's determination to modify the BFEs may itself be changed.

Any person having knowledge or wishing to comment on these changes should immediately notify:

The Honorable Jim Baca
Mayor, City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
 BERNALILLO COUNTY,
 NEW MEXICO AND
 INCORPORATED AREAS

PANEL 359 OF 825
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:
 COMMUNITY NUMBER PANEL SURF

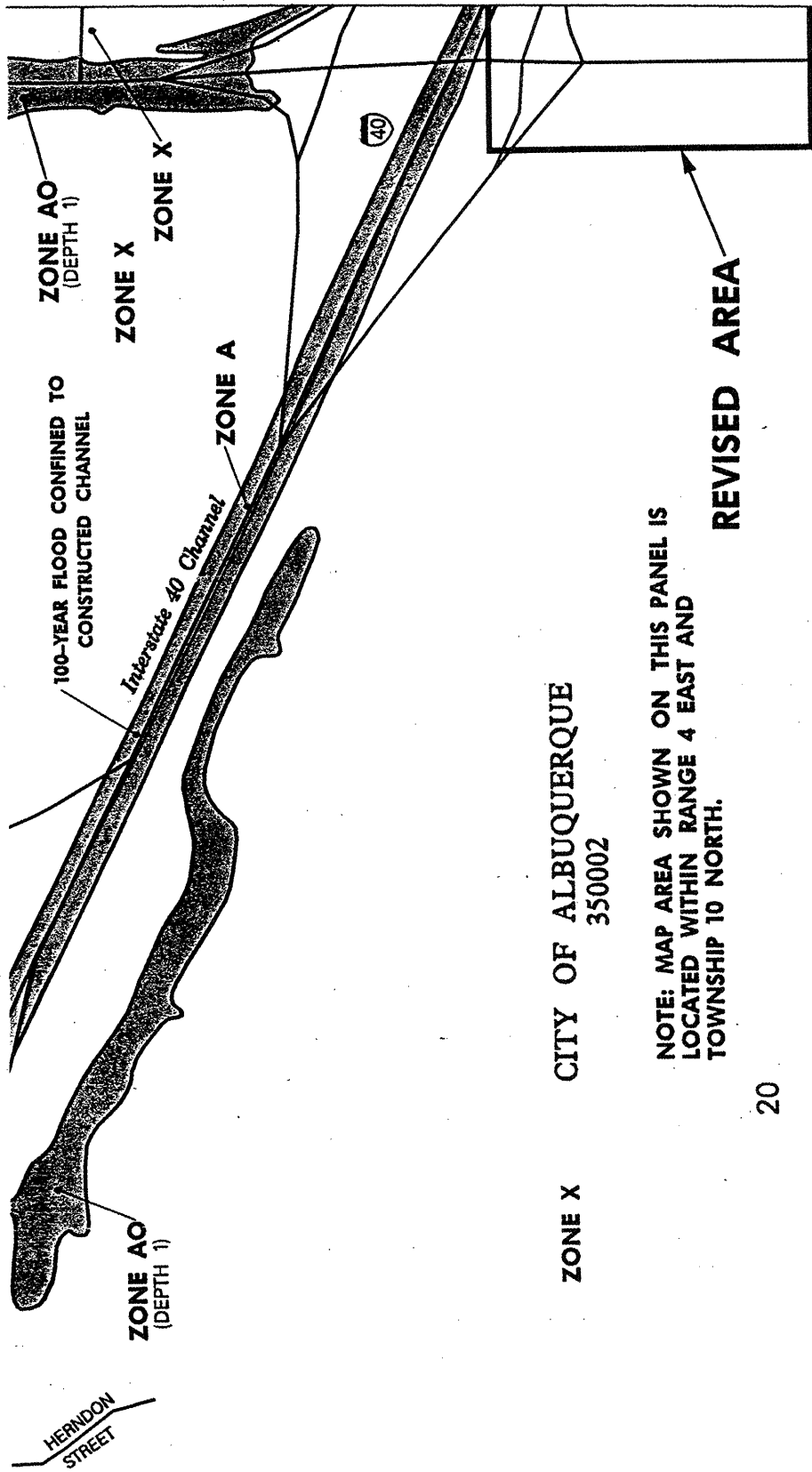
REVISED TO
REFLECT LOMR
DATED JUL 13 2000

MAP NUMBER
 3500TC0359 D

EFFECTIVE DATE:
 SEPTEMBER 20, 1998



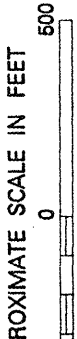
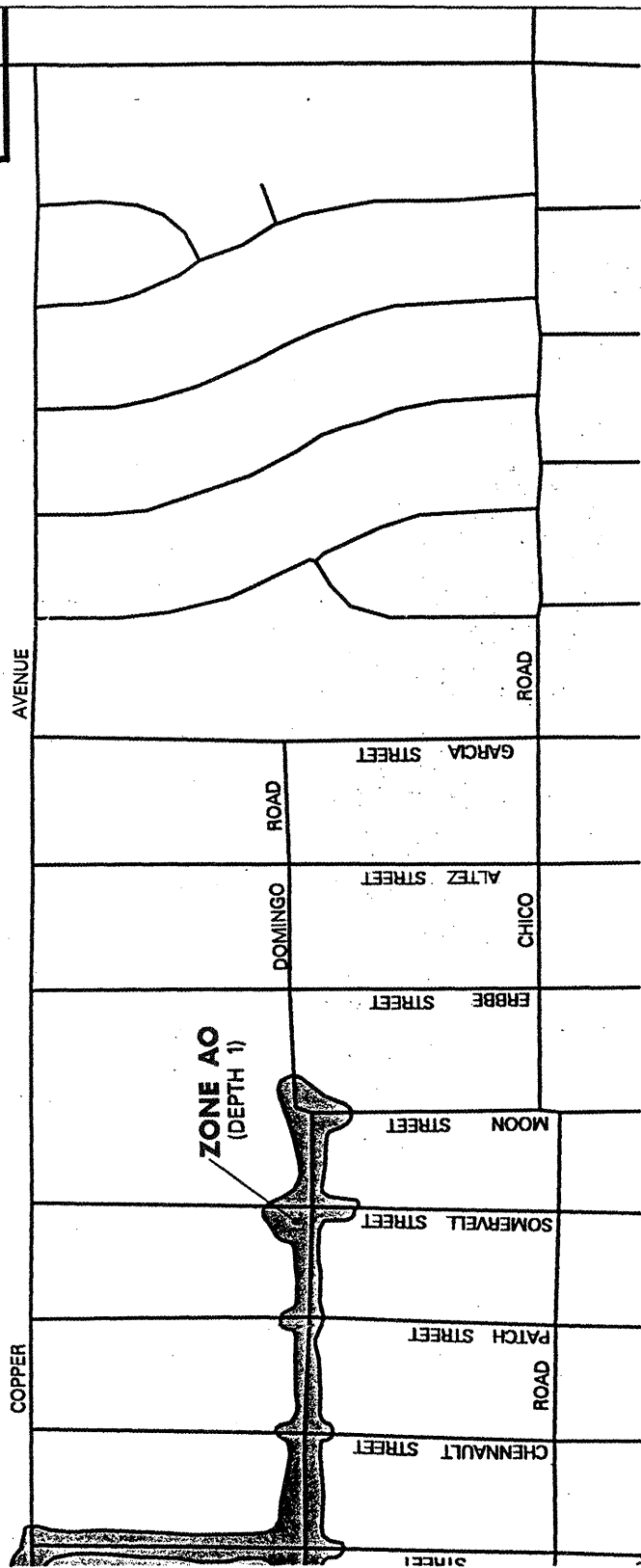
Federal Emergency Management Agency



CITY OF ALBUQUERQUE
350002

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN RANGE 4 EAST AND TOWNSHIP 10 NORTH.

20



NATIONAL FLOOD INSURANCE PROGRAM

FIRM

LOOD INSURANCE RATE MAP
BERNALILLO COUNTY,
NEW MEXICO AND
INCORPORATED AREAS

PANEL 358 OF 825

SEE MAP INDEX FOR PANELS NOT PRINTED

DATE: JUL 13 2000

NUMBER PANEL SUFFIX

350002 0000 0000

ALBUQUERQUE CITY OF

BERNALILLO COUNTY

NEW MEXICO

INCORPORATED AREAS

REVISOR

TO

EFFECT LOMR

MAP NUMBER

35001C0358 D

EFFECTIVE DATE:

SEPTEMBER 20, 1996

SEPTEMBER 20, 1996

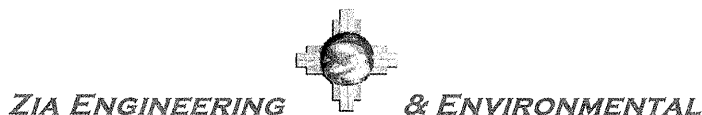
SEPTEMBER 20, 1996

SEPTEMBER 20, 1996

SEPTEMBER 20, 1996

SEPTEMBER 20, 1996

SEPTEMBER 20, 1996



COPY

March 28, 2000

Mr. Monther S. Madant
 Michael Baker Jr., Inc.
 3601 Eisenhower Avenue, Suite 600
 Alexandria, Virginia 22304

**Re: Submittal of Requested Information
 Request for Letter of Map Revision
 HomeBase at Towne Park Plaza
 Albuquerque, New Mexico
 Zia Project No. Z00-003**

**Case No. 00-06-420P
 Community: City of Albuquerque, NM
 Community No.: 350002**

Dear Mr. Madant:

Zia Engineering and Environmental Consultants, Inc. (Zia) is submitting this letter on behalf of HomeBase in response to the letter of January 28, 2000 from Mr. Mathew Miller requesting additional information in support of the above referenced submittal. Per said letter from FEMA, the following items were requested to support the application for a Letter of Map Revision (LOMR):

- Proof of current registration of the engineer of record since the application indicated that the registration of said individual expired in December of 1999;
- A check for \$300 as the fees submitted with the original LOMR application were based on older rates and new rates had increased by the \$300; and
- "As-built" plans, certified by a registered professional engineer for the 48" diameter storm drain pipe under Interstate Highway 40.

Regarding the first item, enclosed with this document is a copy of the documentation of registration renewal for the engineer of record indicated in the original submittal. In addition, a check in the amount of \$300 is also included from the law firm of Calvert Menicucci PC on behalf of HomeBase for the balance of fees due for the application review.

Regarding the last item, due to the age and history of the project, as-built drawings do not appear to be available. The project was originally approved for construction in 1995 and construction was completed in late 1996. In 1997, the City of Albuquerque approved the "Engineer Certification" of construction as indicated in the attached letter from the City dated September 26, 1997. In addition, on June 2, 1998, the City of Albuquerque issued a second letter indicating the project, "has been completed according to approved plans and construction specifications." Since that time, the engineering firm, which completed the original plans and drainage study, has since been acquired and moved. Therefore, they have no records on the project. In addition, the design engineer of record has moved on as well. Therefore, records from these sources were not available.

March 28, 2000
Monther S. Madant
Michael Baker Jr., Inc.
Page 2 of 3



For this reason, over the last several months, files were reviewed through the project attorney and with HomeBase. In addition, a review was conducted for as-built drawings for the project with City of Albuquerque offices including Public Works, Planning, Engineering and Maps & Records. Either as-built drawings were not developed or they have since been lost. Therefore, in late February, I contacted your office as FEMA's contractor representative for review of the LOMR. Unfortunately, as I understand it, the individual responsible for this case no longer works for Michael Baker, Jr. The individual I talked with was not familiar with the case but did indicate that FEMA would likely need to be contacted on what would be acceptable in lieu of "as-builts" since this appeared to be "a policy decision."

I therefore contacted Mr. Alan Johnson with FEMA in Washington, D.C. to discuss the project. I summarized the background of the project to Mr. Johnson and explained why as-built drawings were not available and asked whether some other submittal would be acceptable in lieu of said drawings. Mr. Johnson indicated that, due to the circumstances involved, FEMA would accept the previously submitted approved construction drawings and supporting documentation with a letter certified by an engineer explaining the circumstances and indicating concurrence that the structure was constructed in general compliance with said drawings. This letter is therefore written to provide said background (discussed above) and concurrence as indicated by the following paragraph.

In late February and early March 2000, I Edward H. Martinez P.E., a currently registered professional civil engineer in the State of New Mexico (registration no. 13731), conducted a review of the pipe structure located at the northeast corner of the HomeBase property on Eubank and Interstate Highway 40 in Albuquerque, NM. This review was conducted in an effort to determine the approximate pipe diameter, length, material type and approximate invert elevations at the pipe entrance and exits. Information obtained from this review were compared to planned improvements indicated on Sheets 8 and 9 of the approved construction drawings dated by the design engineer of record on 2/19/95 and labeled, "I-40 Diversion Storm Drain" (reduced copies are attached). Based on this review, by my signature and seal included below, I certify that the structure was found to generally comply with said drawings to within acceptable engineering and construction tolerances for a structure of this type.



March 28, 2000
Monther S. Madant
Michael Baker Jr., Inc.
Page 3 of 3



To expedite the process, Mr. Johnson suggested we submit the documents directly to FEMA Regional Headquarters in Virginia. I contacted Regional Headquarters who directed me to submit the documents directly to your office. I have also contacted Ms. Susan Calogne, flood plain engineer with the City of Albuquerque to inform her of the status. She indicated that, to expedite the process, I could submit directly to FEMA/Michael Baker Jr. and to c.c. her in the letter rather than submit to her for forwarding of the documents.

In closing, Zia Engineering and Environmental Consultants, Inc., on behalf of HomeBase, appreciates the anticipated cooperation of your firm and FEMA in review and approval of the LOMR for this project. Should you have questions or require additional information regarding this submittal or the original application, please contact the undersigned at (505) 532 - 1526.

Sincerely,
Zia Engineering and Environmental Consultants, Inc.

Edward H. Martinez, P.E.
Principal Engineer

E:\M\em\zia\c\projects\Z00003 HomeBase LOMR Response.DOC

Attachments: Copy of P.E. registration renewal
Check in amount of \$300
City of Albuquerque letter dated 9/26/97
City of Albuquerque letter dated 6/2/98
Sheets 8 & 9 of approved construction plans dated 2/19/95 (reduced copies)

Pc: Doug Houser; HomeBase
Susan Calogne; City of Albuquerque
John Rebstock; Calvert Menicucci, P.C.
File Z00003



City of Albuquerque
P.O. Box 1293 Albuquerque, NM 87103
Public Works Department

June 2, 1998

Certificate of Work Order Completion

Rick Roybal
City Engineer
600 Second St.
Plaza Del Sol
Albuquerque, NM 87102

Re: Homebase in Towne Park Plaza Project No. 5064.80 (Map No. K-21)

Dear Sir:

This is to certify that Project No. 5064.80 has been completed according to approved plans and construction specifications. Please be advised this Certificate of Work-Order Completion does not constitute acceptance of the city infrastructure until all requirements of the subdivision improvements agreement have been satisfied and a Certificate of Completion and Acceptance is issued by the City Engineer.

The project is described as follows:

- This project which is located at the N.E. corner of Eubank and Copper upgraded and improved the storm drainage on Copper east of Eubank including the Homebase parking lot and traffic signalization as well as the pavement and water system to serve the new business at this location. The 6' sidewalk on Eubank was reconstructed by the NMSHTD.
- A 4' sidewalk on the north side of Copper east of Eubank was constructed under this work order.
- An 8' bike trail was constructed by NMSHTD.

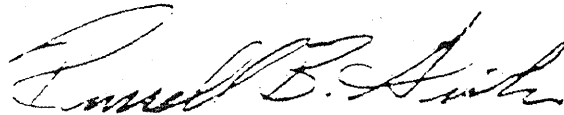
The contractor's correction period will begin the date of the City Engineer's Certificate of Completion and Acceptance letter and is effective for a period of one (1) year.

Homepage Towne Park

Project No. 5064.80

June 2, 1998

Sincerely,



Russell B. Givler, P.E.

Chief Construction Engineer

Public Works Department

TLC Plumbing
Avid Engineering
Fred Acuirre, Hydrology, PWD
Tina Pohl, DRC
Tern Martn, DRC
Martin Barker, Materials Testing Lab
Sam Hall, Water Systems
Ray Chavez, Traffic Engineering, PWD
Josie Jaramillo, New Meter Sales, PWD
Richard Zamora, Maps & Records, PWD
John Ewing, Risk Management
Project No. 5064.80
Warranty: Contract



Martin J. Chavez, Mayor

September 26, 1997

Rick Beltramo
AVID Engineering
6100 Seagull St NE
Albuquerque, New Mexico 87109

RE: REVISED ENGINEER CERTIFICATION FOR HOMEBASE AT TOWNE PARK
PLAZA (K21-D9E) 8/14/97

Dear Mr. Beltramo:

Based on the information provided on your September 2, 1997 resubmittal, Engineer Certification for the above referenced site is acceptable. Please be advised that the permanent Certificate of Occupancy will not be issued until the Work Order has been accepted and an acceptance letter has been provided by the Construction Division.

Please be advised that the Work Order is a part of the Certificate of Occupancy release for the private portion.

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia
File

Sincerely

Bernie J. Montoya CE
Associate Engineer

John, this letter shows that the final certification
was submitted, reviewed and approved.

Rick Beltramo

Good for you, Albuquerque!





City of Albuquerque

October 22, 1999

Edward H. Martinez, P.E.
Terracon
4416 Anaheim NE
Albuquerque, New Mexico 87113

RE: *Request for a Letter of Map Revision for HomeBase at Town Park Plaza, Submitted August 26, 1999.*

Dear Mr. Martinez:

Before I may submit the above referenced request to FEMA, the following information must be provided:

1. The As-Built plans for both the site itself and the 48" outfall pipe must be provided with the submittal to show that construction is complete. Our office has a copy of the certified grading and drainage plan for the HomeBase site. If you would like to make copies of this plan, please contact this office.
2. Please address maintenance of the 48" outfall pipe. FEMA will require that a public agency maintain this facility.

You may pick up the copies of the LOMR request from my office to make these revisions, or just provide the appropriate information. I will hold the FEMA submittal and the check for the review fee until I hear from you. If you have any questions, please call me at 924-3982.

Sincerely,

Susan M. Calongne, P.E.
City/County Floodplain Administrator

c: File



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 27, 1995

Rick Beltramo, P.E.
AVID Engineering
6100 Seagull St. NE
Albuquerque, NM 87109

RE: BERM CERTIFICATION FOR HOME BASE AT TOWNE PARK (K-21/D9E)
RECEIVED JUNE 27, 1995 FOR CERTIFICATE OF OCCUPANCY
ENGINEER'S STAMP DATED 6/27/95

Dear Mr. Beltramo:

Based on the information included in the submittal referenced above, City Hydrology accepts the Temporary Berm Certification and agree to extend the Temporary Certificate of Occupancy for an additional 60 days.

Be aware, It is Home Base's responsibility to insure that the diversion berm is maintained until the permanent diversion storm drain is in place. Since the diversion berm is all that protects the Home Base Store from flooding during a major storm, it is in their own interest, as well as their responsibility to see that it is properly maintained and adequate to divert at least the 10 year storm of approximately 140 cfs. Based on the calculations submitted the existing berm has a capacity of about 25 cfs.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia
David Steele, Code Administration
John Low, WABAN Inc., 3345 Michaelson Dr, Irving CA 92715

June 26, 1995

Mr. John Curtin, P.E.
City Engineer/Hydrology
Public Works Department
City Of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

RE: HOMEBASE AT TOWNE PARK PLAZA TEMPORARY BERM CERTIFICATION

Dear John:

Submitted with this letter is the required Grading and Drainage Certification of the temporary diversion berm located at the northeast corner of the HomeBase site. As we discussed in our last phone conversation, extension of the Temporary Certificate of Occupancy (TCO) would not be granted until the diversion berm was constructed and as-built. This letter is a certification of the constructed berm based on a field inspection and survey by Surv-Tek, a licensed New Mexico surveyor.

The diversion berm is designed to redirect offsite flows from the channel and discharge directly to the I-40 roadway swale. the roadway swale in turn outfalls to an existing 36" diameter storm drain. The capacity of the Berm is based on the weir equation, King and Brater, consisting of a 2 part broadcrested weir. Part a) represents the trapezoidal section and part b) represents the triangular part.

	trapezoidal		triangular
Q	$=C \times L \times H^{3/2}$	+	$C \times L \times H^{3/2}$
	$=3.0 \times 6.0 \text{ ft.} \times 1.0 \text{ ft}^{3/2}$	+	$(2.46 \times 17.0 \text{ ft} \times 0.5 \text{ ft}^{3/2}) \times 1/2$
	$=18 \text{ cfs}$	+	7.4 cfs
	$=25.4 \text{ cfs}$		

Attached is an exhibit showing as-built grades and certification statement with my P.E. stamp and a Drainage Information sheet. Please call me if you have any questions regarding this submittal.

Sincerely,



Rick Beltramo, P.E.
Project Manager

Attachments

FILE: SONORA/CORRESPONDENCE/CURTIN.DOC

JUN 27 1995



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 29, 1995

**Rick Beltramo, P.E.
AVID Engineering
6100 Seagull St. NE
Albuquerque, NM 87109**

**RE: PARTIAL ENGINEER'S CERTIFICATION FOR HOME BASE AT TOWNE PARK
(K-21/D9E); RECEIVED MARCH 3, 1995 FOR CERTIFICATE OF OCCUPANCY
ENGINEER'S STAMP DATED 12/13/94 REVISED 2/95**

Dear Mr. Beltramo:

Based on the information included in the submittal referenced above, City Hydrology accepts the Partial Engineer's Certification for a 30 day temporary Certificate of Occupancy. A permanent Certificate of Occupancy will not be released until Option "B" is constructed & accepted.

The Owner is must accept the off-site flow until Option "B" is constructed. Provide City Hydrology with a copy of the Plan for the interim improvements required deal with the off-site flow.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

**John P. Curtin, P.E.
Civil Engineer/Hydrology**

**c: Andrew Garcia
Steve Gale, WABAN Inc., 3345 Michaelson Dr, Irving CA 92714**



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 22, 1995

Rick Beltramo, P.E.
AVID Engineering
6100 Seagull St. NE
Albuquerque, NM 87109

RE: DRAINAGE REPORT FOR HOME BASE AT TOWNE PARK (K-21/D9E)
RECEIVED MARCH 3, 1995 FOR WORK ORDER APPROVAL
ENGINEER'S STAMP DATED 12/13/94 REVISED 2/95

Dear Mr. Beltramo:

Based on the information included in the submittal referenced above, City hydrology approves Option B for Work Order. A permit must be obtained from the NMSHTD to work in their right of way.

Option A is not a viable alternative. Restudy of the Eubank Storm Drain system by Smith Engineering indicates that there is no excess capacity to be utilized by this project.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia
Raymunda Van Hoven, NMSHTD, P.O. Box 1149, Santa Fe NM 87504-1149
Steve Gale, Waban Inc., 3345 Michaelson Dr, Irving CA 92714



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 14, 1994

Rick Beltramo, P.E.
AVID Engineering, Inc.
6100 Seagull St NE Suite 102
Albuquerque, N.M. 87109

RE: DRAINAGE REPORT FOR HOME BASE @ TOWNE PARK (K-21/D9E)
RECEIVED NOVEMBER 1, 1994 FOR S DEV PLAN & FOUNDATION PERMIT APPROVAL
ENGINEER'S STAMP DATED 10/31/94

Dear Mr. Beltramo:

Based on the information included in the submittal referenced above, City Hydrology approves this Project for Site Development Plan for B.P. and Foundation Permit. Include a copy of the approved Grading & Drainage Plan, dated 10/31/94 in the set of construction documents that will be submitted to the "one stop" for the Foundation Permit.

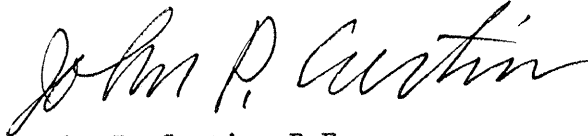
The following comments must be addressed prior to Building Permit approval:

1. Based on the AHYMO runs, it appears that the Hydrologic Analysis should read "the 72"SD flow peaked at 2.0 hrs. versus the on-site which peaked at 1.6 hrs., a difference of 0.4 hrs."
2. The values used for Tp in the AHYMO runs appears to be too high. Typically, Tp=0.13 hrs for commercial areas. Justify the values chosen using the methods in the January 1993 Hydrology. The assumptions in the AHYMO comments do not match the Land Treatment percentages used. This will confuse the reader and compromise the integrity of the Report.
3. The AHYMO runs do not include any verification that the 72"SD or the 36"&24SD can convey the flows calculated. Include appropriate portions of the Towne Park Plaza Master Drainage Report to verify their capacity.
4. NMSHTD must approve any discharge to their right of way. Also, they must approve and issue the proper permits for any work in their right of way.
5. The Grading & Drainage Plan indicates that Basin HB-1 has a Q100 of 17 & 16 cfs. The AHYMO run indicates that Q100 is 22.7 cfs. Which is correct?
6. Indicate the location of the 36" & 24" SD on the Plan. Label the bike ramp. Indicate the Work Order number instead of labeling catch basins "not in this contract".
7. The Erosion Control Plan must be included on the Grading & Drainage Plan.

November 14, 1994
Rick Beltramo, P.E.
HOME BASE @ TOWNE PARK (K-21/D9E)
Page 2 of 2

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

A handwritten signature in cursive script, reading "John P. Curtin". The signature is written in dark ink and is positioned above the printed name and title.

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia
Fred Aguirre, DRB 94-277
Raymunda Van Hoven; NMSHTD; P.O. Box 1149; Santa Fe, NM 87504-1149

WPHYD/8684/jpc



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 2, 1994

Rick Beltramo, P.E.
AVID Engineering, Inc.
6100 Seagull St NE Suite 102
Albuquerque, N.M. 87109

RE: DRAINAGE REPORT FOR HOME BASE @ TOWNE PARK (K-21/D9E)
RECEIVED NOVEMBER 2, 1994 FOR FOUNDATION PERMIT APPROVAL
ENGINEER'S STAMP DATED 10/31/94

Dear Mr. Beltramo:

Based on the information included in the submittal referenced above, City Hydrology approves a Foundation Permit for this Project.

Include a copy of the approved Grading & Drainage Plan, dated 10/31/94 in the set of construction documents that will be submitted to the "one stop" for the Foundation Permit.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia

WPHYD/8684/jpc



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 1, 1994

Rick Beltramo, P.E.
AVID Engineering, Inc.
6100 Seagull St NE Suite 102
Albuquerque, N.M. 87109

RE: DRAINAGE REPORT FOR HOME BASE @ TOWNE PARK (K-21/D9E)
RECEIVED JULY 19, 1994 FOR SITE DEV PLAN FOR B.P. & PRELIMINARY PLAT
APPROVAL; ENGINEER'S STAMP DATED 7/11/94

Dear Mr. Beltramo:

Based on the information included in the submittal referenced above, City Hydrology approves Option A for Site Development Plan & Preliminary Plat.

The following comments must be addressed prior to Building Permit approval:

1. Revise AHYMO runs to reflect the proposed conditions. Eliminate existing on-site 36"RCP from program. Master Plan indicates that the 83.6 cfs that escapes the storm drain at Copper is recaptured at AP2F. Verify that overflow discharges to Copper and does not continue in Eubank.
2. Percentages of land treatment D used do not match descriptions of the assumptions. Provide backup information to justify the percentages used.
3. Submit a detailed Grading Plan. Indicate water blocks along Eubank & Copper. How does the low spot at the SW corner drain?

If Option B is chosen, then a revised Drainage Report & Infrastructure List must be submitted.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Fred Aguirre

WPHYD/8684/jpc

EXISTING CONDITIONS

BASINS	AREA (acres)	Q(100) (cfs)	Q(10) (cfs)
IP parcel	20.992	30.7	8.8
C2 parcels	28.160	36.9	8.7
TOTALS	49.152	67.6	17.5

TPP MOP
1991 by B-HI

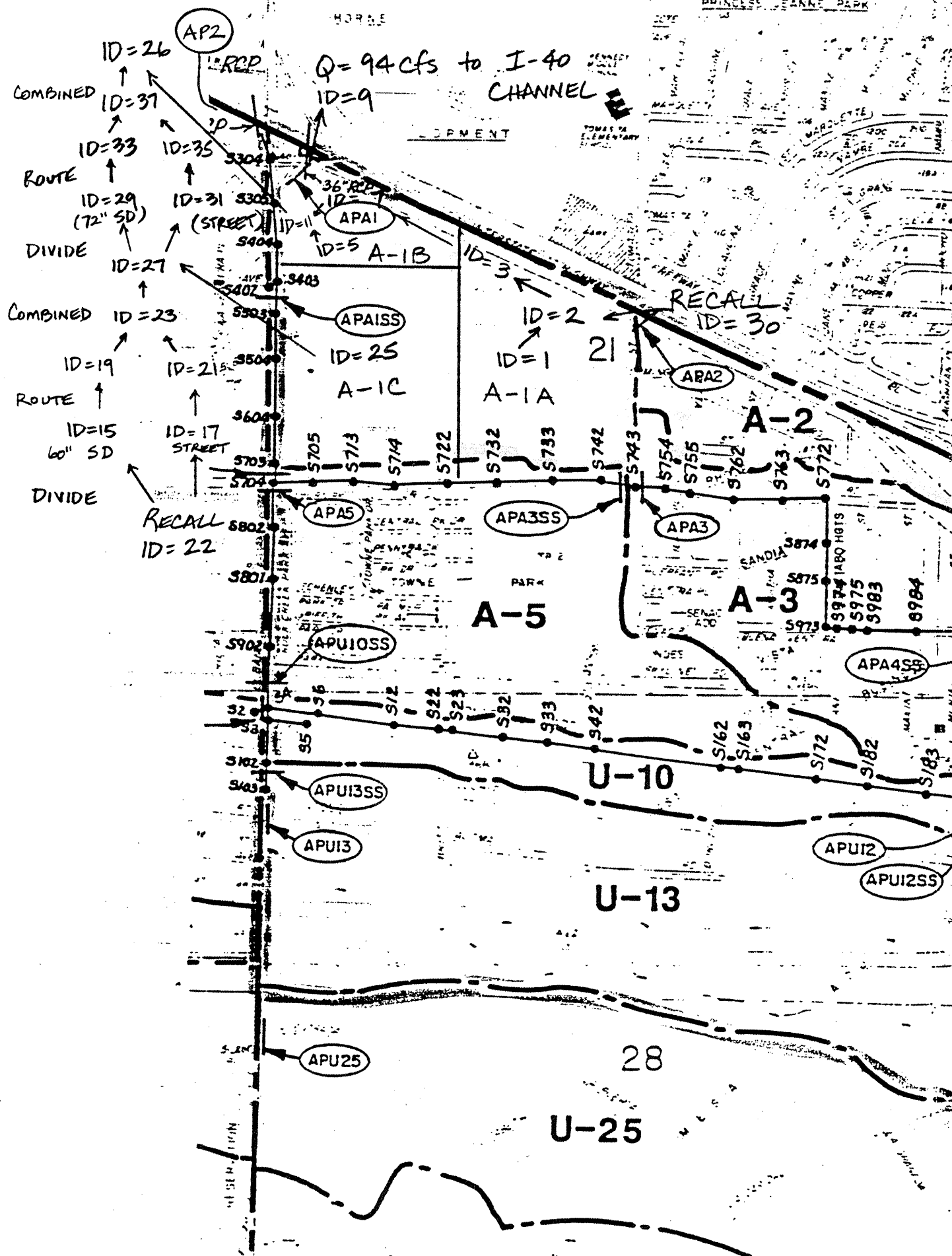
PROPOSED CONDITIONS

IP parcel	16.768	70.1	44.1
C2 parcel:			
A	7.489	35.0	23.0
B	6.693	31.0	21.0
C	5.413	25.0	17.0
D	5.433	26.0	17.0
E	7.356	35.0	23.0
C2 Totals	32.384	152.0	101.0
Totals	49.152	222.1	144.1

Analysis of the proposed conditions looked at four scenarios:

1. 100-year @ $T_p = 1.0$ hrs, peak flow for entire basin (Profile #1)
2. 100-year @ $T_p = 0.6$ hrs, peak flow for on-site (Profile #2)
3. 10-year @ $T_p = 1.0$ hrs, peak flow for entire site
4. 10-year @ $T_p = 0.6$ hrs, peak flow for on-site

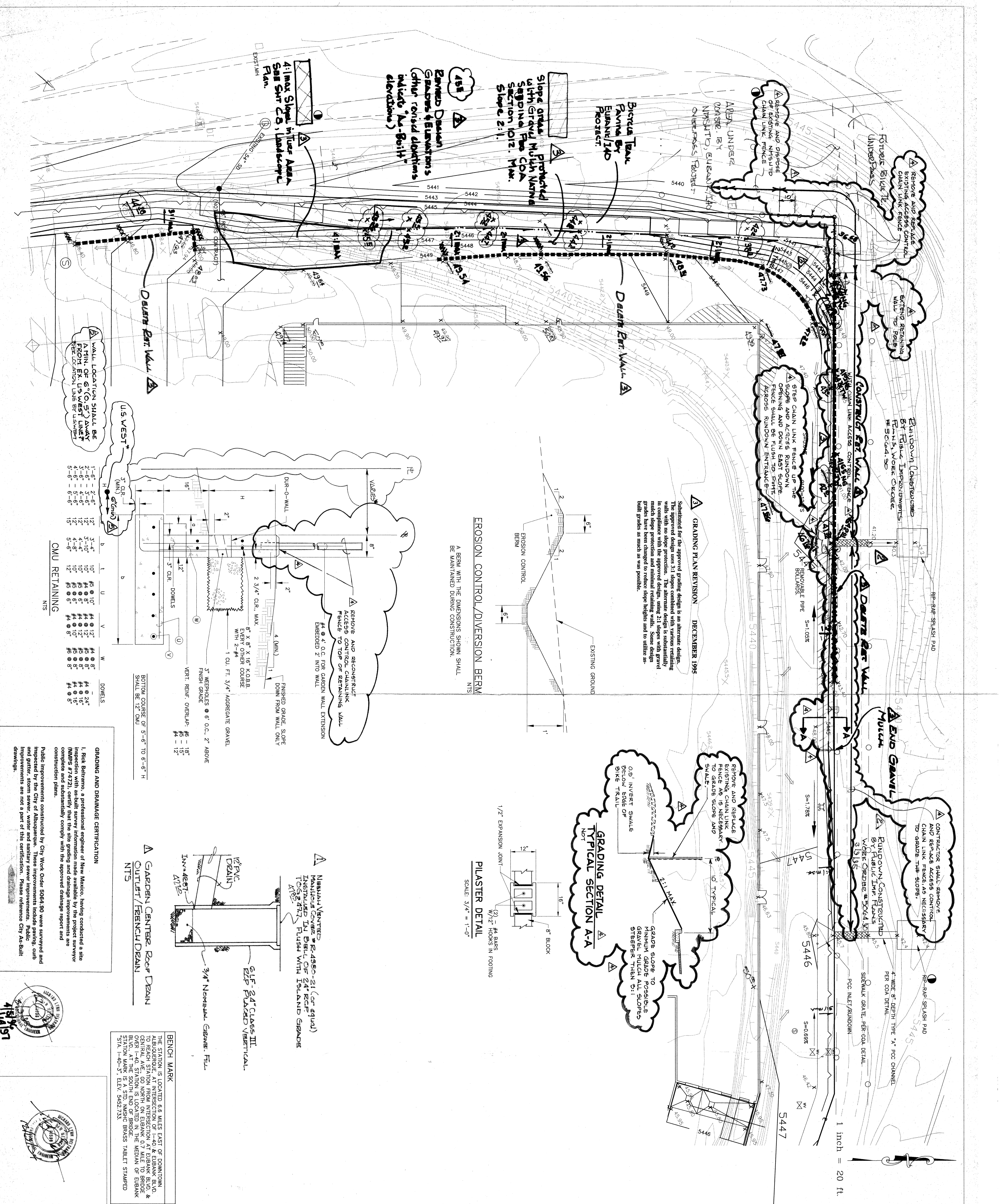
Under scenario #1, the proposed developed runoff increased the total 100-year flow from existing conditions by 36 cfs. This is an increase of 9%. Even though tracts C1 and IP generate 222 cfs, the peaks occur approximately 0.5 hrs before the system peak occurs. Only the receding leg of the hydrograph remains at $T_p = 1.0$ hrs. Therefore, the runoff from on-site basins passes through the system before the large offsite flows reach Copper Ave. and increased runoff from the site has almost no effect on the system during the 100-year or any storm event. For this reason, free discharge to the 72" storm drain is recommended for this development.



100-YEAR 6-HOUR STORM
PROPOSED DEVELOPED CONDITIONS

HYMO SUMMARY TABLE

0	DESCRIPTION	HYDROGRAPH LABEL	FROM ID NO	TO ID NO	AREA SQ MI	DISCHARGE CFS	CURVE NO	TIME TO PEAK HR	CFS PER ACRE
	HYDROGRAPH AT	A-1A	1	-	0.0794	89.1	NA	0.60	1.7
	RECALL HYD	A2	30	-	0.0540	37.0		0.69	
	COMBINED FLOW AT	AP2C	1&30	2	0.1334	124.7		0.65	
	ROUTED		2	3					
		AP2C	2		0.1334	124.7		0.65	
		APA1R	3		0.1334	104.5		0.73	
	DIVIDED FLOW AT		3	9& 7					
		I40SS	9	-	0.1334	94.0	36"	0.00	
		APA1CH	7	-	0.0000	10.5		0.00	
	HYDROGRAPH AT	A-1B	5	-	0.0262	70.2	NA	0.50	4.1
	COMBINED FLOW AT	APA1C	5& 7	11	0.0262	70.2		0.50	
	RECALL HYD	APA5SS	22	-	0.6200	404.0		0.94	
	DIVIDED FLOW AT		22	15&17					
		APA515SS	15	-	0.6200	159.0		0.00	
		APA517OL	17	-	0.0000	245.0		0.00	
	ROUTED 60"		15	19					
		APA515SS	15		0.6200	159.0		1.65	
		APA19SS	19		0.6200	159.0		1.23	
	ROUTED		17	21					
		APA517OL	17		0.0000	245.0		0.94	
		APA21OL	21		0.0000	232.5		1.00	
	COMBINED FLOW AT	APA123C	21&19	23	0.6200	391.5		1.00	
	HYDROGRAPH AT	A-1C	25	-	0.0506	151.9	NA	0.50	4.6
	COMBINED FLOW AT	APA1SS27	23&25	27	0.6706	425.6		0.98	
	DIVIDED FLOW AT		27	29&31					
		APA129SS	29	-	0.6706	342.0		0.00	
		APA131OL	31	-	0.0000	83.6	Copper	0.00	
	ROUTED 72"		29	33					
		APA129SS	29		0.6706	342.0		1.21	
		AP233SS	33		0.6706	342.0		0.96	
	ROUTED		31	35					
		APA131OL	31		0.0000	83.6	Copper	0.98	
		AP235OL	35		0.0000	79.5		1.02	
	COMBINED FLOW AT	AP2C	33&35	37	0.6706	421.5		1.02	
	COMBINED FLOW AT	AP2F	37&11	26	0.6968	434.4		1.00	



GENERAL NOTES FOR RETAINING WALL

1. RETAINMENT CLEARANCE IN ALL CASES SHALL BE 2'-3/4" MAX.
2. RETAINMENT CLEARANCE IN ALL CASES SHALL BE 2'-3/4" MIN., UNLESS OTHERWISE NOTED.
3. 1/2" EXPANSION JOINT TO BE USED AT ALL TRANSITIONS IN SECTIONS.
4. ALL OUV RETAINING WALL SHALL BE FILLED WITH CONCRETE.
5. ALL OUV RETAINING WALL SHALL BE FILLED WITH CONCRETE.
6. ALL OUV RETAINING WALL SHALL BE FILLED WITH CONCRETE.
7. ALL OUV RETAINING WALL SHALL BE FILLED WITH CONCRETE.
8. ALL OUV RETAINING WALL SHALL BE FILLED WITH CONCRETE.
9. ALL OUV RETAINING WALL SHALL BE FILLED WITH CONCRETE.
10. ALL OUV RETAINING WALL SHALL BE FILLED WITH CONCRETE.

LEGEND

- EXISTING STANDARD CURB & GUTTER
- PROPOSED STANDARD CURB & GUTTER
- EXISTING GROUND CONTOUR
- PROPOSED GROUND CONTOUR
- PROPOSED CONCRETE VALLEY CUTTER
- PROPOSED WHEELCHAIR RAMP
- PROPOSED SPOT ELEVATION
- PROPOSED FLOW DIRECTION
- PROPOSED WATER BLOCK
- TEMPORARY EROSION CONTROL BERM
- PROPOSED UTILITY MANHOLE
- PROPOSED DROP INLET
- PROPOSED RETAINING WALL

MATERIALS

CONCRETE: f'c = 3000 PSI
MORTAR: 1800 PSI (TYPE S)
MASSING: 1500 PSI
REINFORCING: GRADE 60

REVISIONS

NO.	DATE	REVISIONS	BY
1	11/15/95	GRADING PLAN REVISION	BT

HomeBase
AMERICA'S BEST HOME IMPROVEMENT WAREHOUSE

TOWNE PARK PLAZA

AT

RETAINING WALL AND GRADING DETAILS

4028/4029

9/94

C5

GRADING AND DRAINAGE CERTIFICATION

I, Rick Behrman, a professional engineer of New Mexico, having conducted a site inspection with as-built survey information made available by the project surveyor (MHP's 874121), certify that the site grading and drainage improvements are complete and substantially comply with the approved drainage report and construction plans.

Public Improvements constructed by City Work Order 5064.90 were surveyed and inspected by the City of Albuquerque. These improvements include paving, curb and gutter, storm sewer, water and sanitary sewer improvements. Public Improvements are not a part of this certification. Please reference City As-Built drawings.

BENCH MARK

THE STATION IS LOCATED 6.6 MILES EAST OF DOWNTOWN ALBUQUERQUE, AT INTERSECTION OF I-40 & EUBANK BLVD. TO REACH STATION FROM INTERSECTION AT EUBANK BLVD. & I-40, TRAVEL SOUTH ON I-40 TO THE INTERSECTION OF I-40 & EUBANK BLVD. AT THE SOUTH END OF BRIDGE. STATION MARK IS STANDARD BRASS TABLET STAMPED 504.140-3, ELEV. 5042.73.

HYDROLOGY SECTION

SEP 02 1997

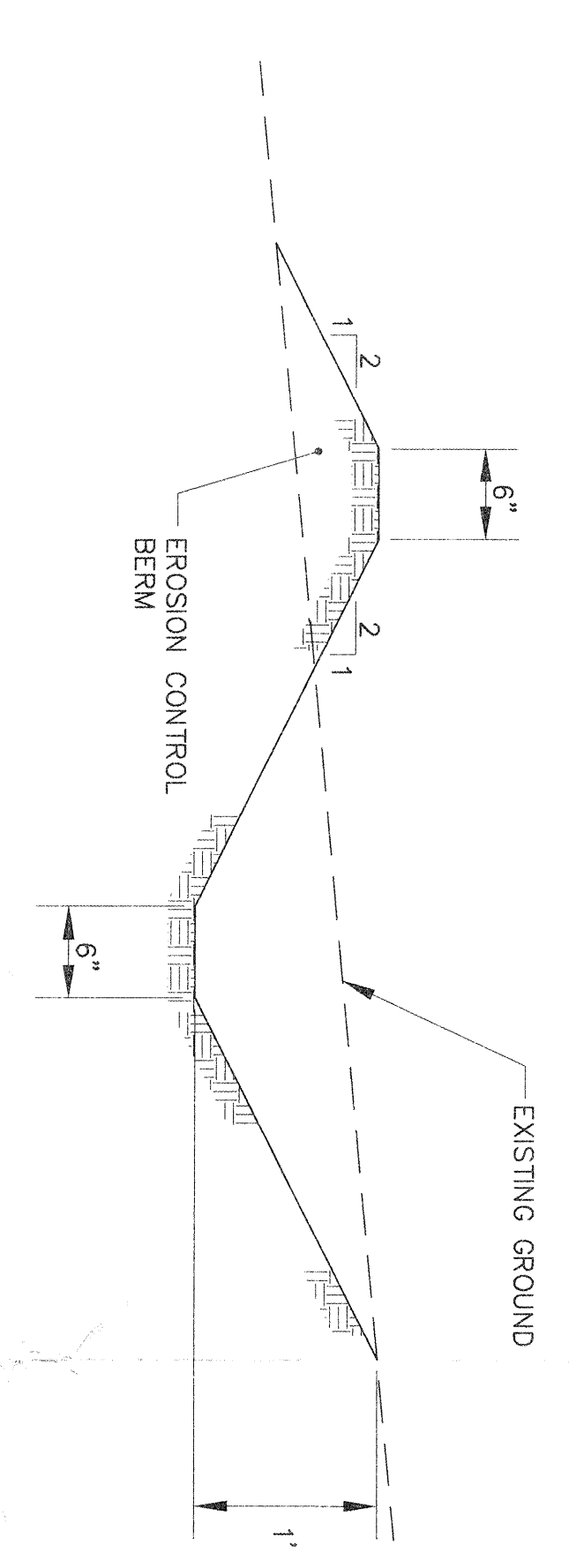
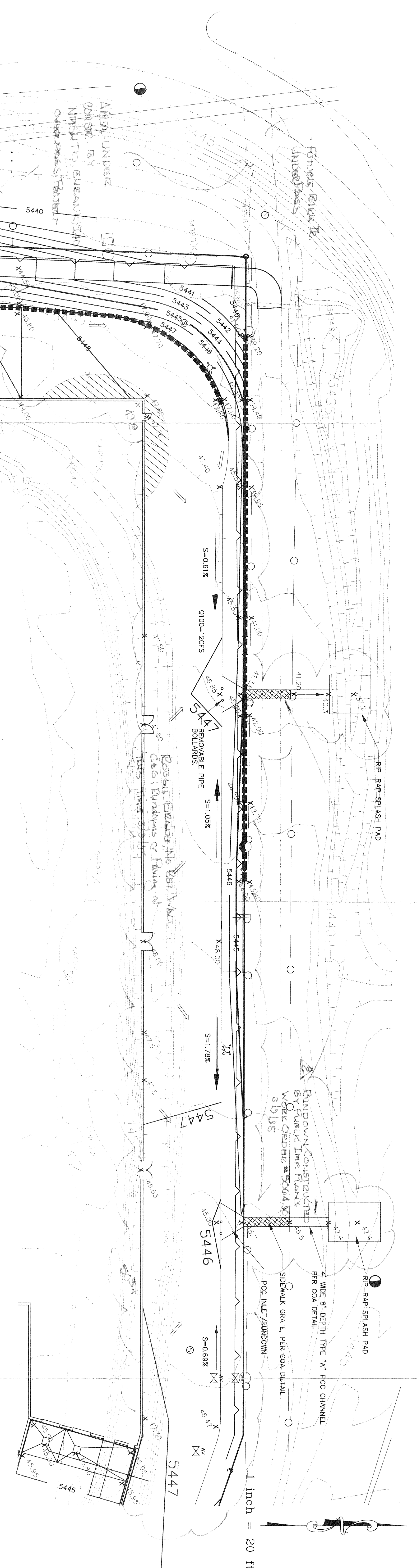
AVID ENGINEERING, INC.

Civil/Structural/Transportation

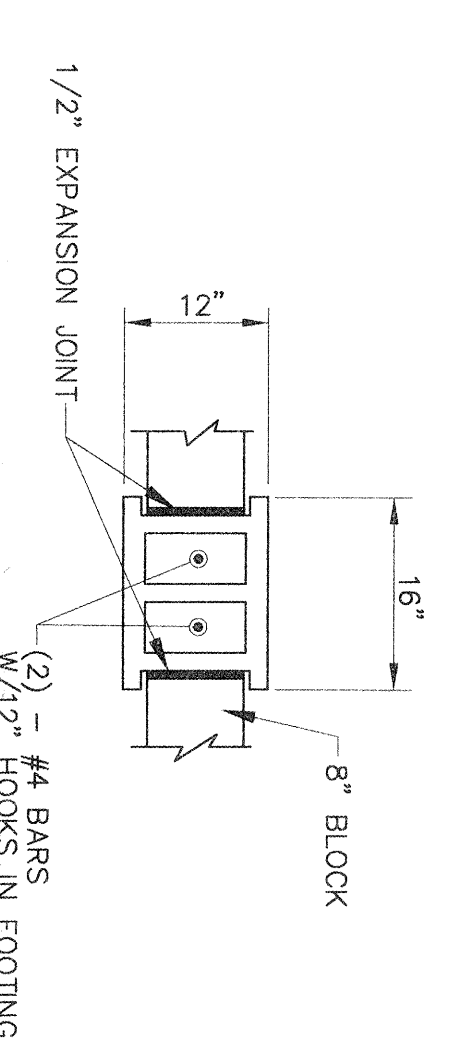
4028/4029

9/94

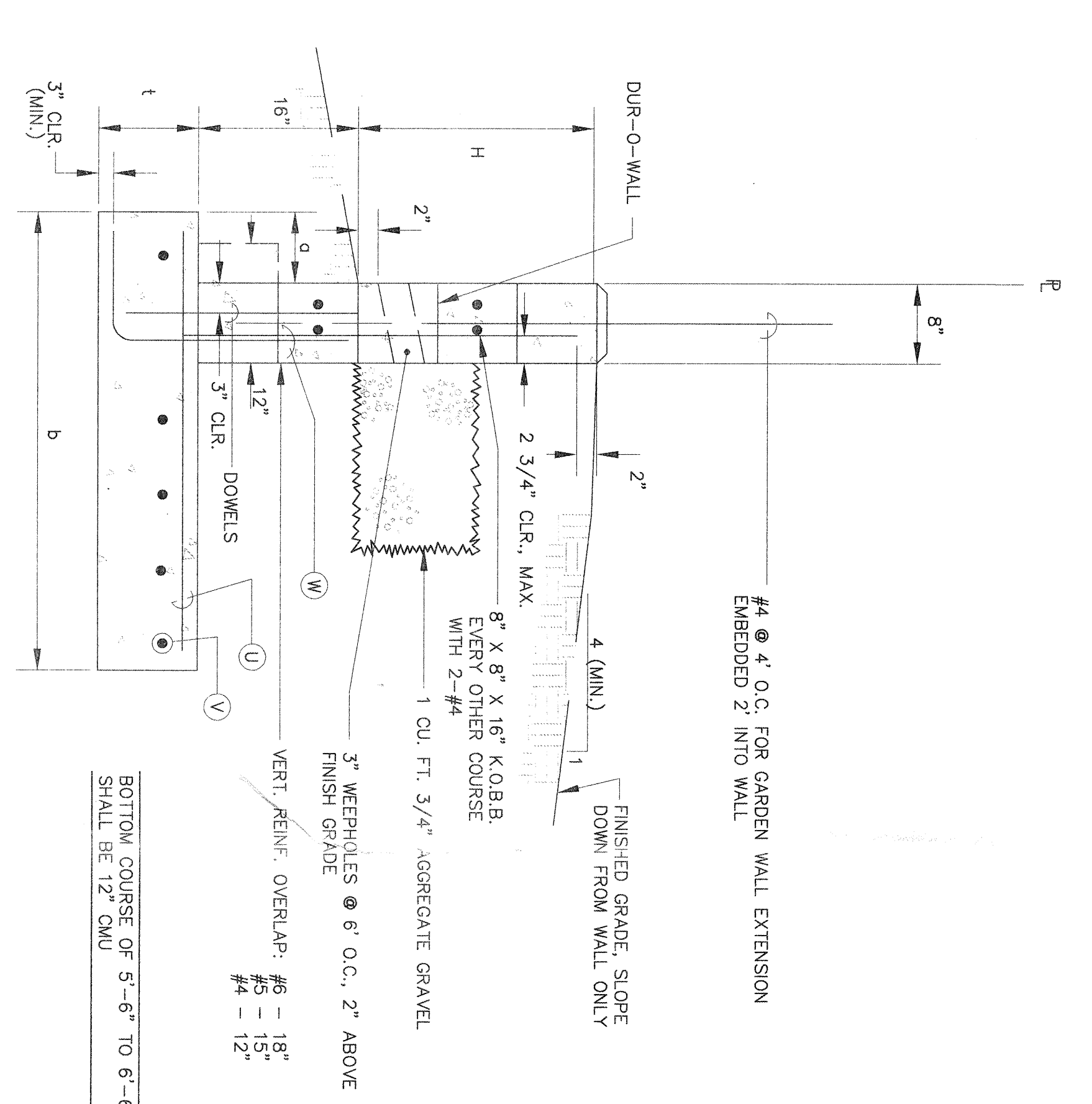
C5



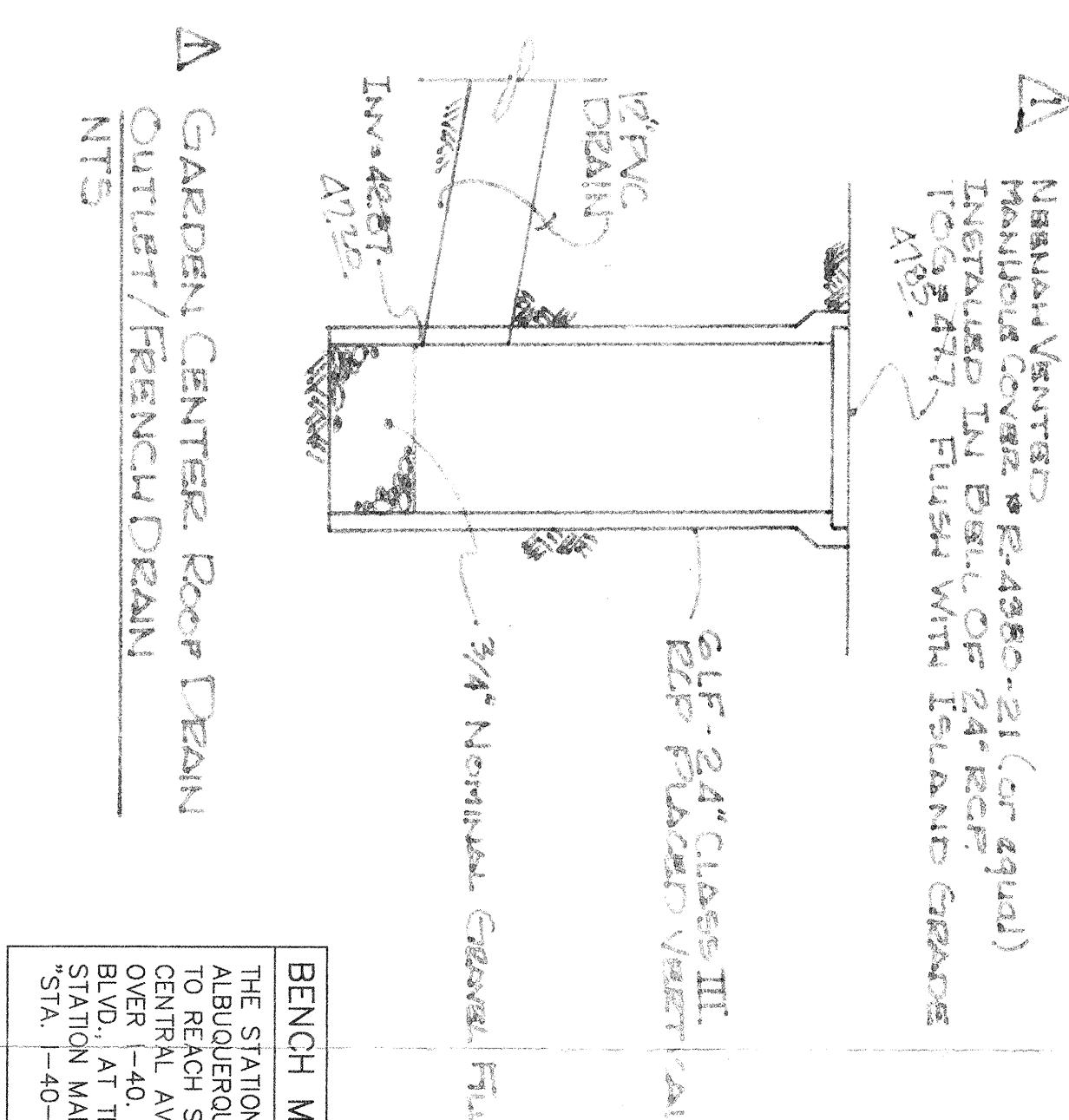
EROSION CONTROL/DIVERSION BERM
A BERM WITH THE DIMENSIONS SHOWN SHALL
BE MAINTAINED DURING CONSTRUCTION.



PLASTER DETAIL
SCALE: 3/4" = 1'-0"



CMU RETAINING



GARDEN CENTER ROOF DRAIN

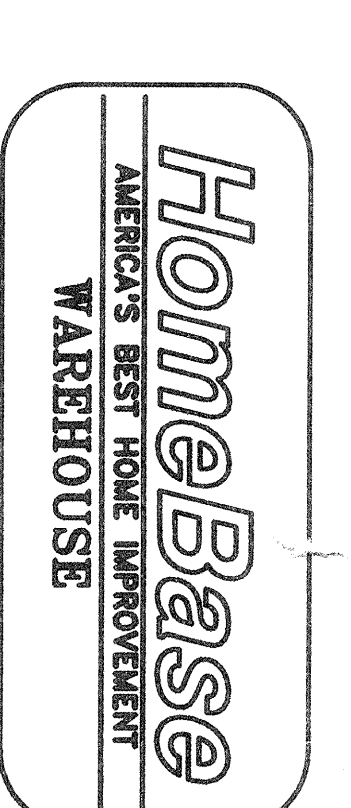
BENCH MARK
THE STATION IS LOCATED 6.6 MILES EAST OF DOWNTOWN
ABILENE, TEXAS, AT THE INTERSECTION OF I-40 & EUBANK BLVD.
THE BENCH MARK IS A 12" DIA. BRASS TABLET STAMPED
WITH THE FOLLOWING INFORMATION:
ELEV. 5440.00
DATE 10/15/10
BY [Signature]

- GENERAL NOTES FOR RETAINING WALL
1. REINFORCEMENT CLEARANCE IN ALL CMU = 2-3/4" MAX.
 2. REINFORCEMENT CLEARANCE IN ALL CONCRETE = 2" MIN. UNLESS OTHERWISE NOTED.
 3. PROVIDE EVERY 16 FT. IN CMU AND CONCRETE AND AT TRANSITIONS IN SECTIONS.
 4. ALL CMU RETAINING WALLS SHALL BE FILLED WITH CONCRETE.
 5. ALL FOOTING CORROSION SHALL BE 95% MODIFIED PROCTOR PER ASTM D-1557.
 6. TWO (2) WORKING DAYS BEFORE CONSTRUCTION, CONTRACTOR SHALL NOTIFY THE LOCALING SERVICE.
 7. CONTRACTOR SHALL CORRODATE ANY UNDERMINING OF THE WALLS WITH THE DRAINAGE SYSTEMS.
 8. DRAINAGE SHALL BE USED AS AN ALTERNATIVE TO BOND BEAMS.
 9. BACK FILLING AGAINST REINFORCED CONCRETE MASONRY RETAINING WALL SHALL BE COMPLETED WITHIN 7 DAYS AFTER PLACING THE WALLS DESIGNED TO RESIST EARTH PRESSURE. SUCH EQUIPMENT SHALL BE USED TO RESIST EARTH PRESSURE. THE WALL SHOULD BE TAKEN TO AVOID EXERTING LARGE MASS OF MOVING EARTH.
 10. INSPECTION OF WALLS DURING CONSTRUCTION BY THE ENGINEER IS REQUIRED FOR ACCEPTANCE.

MATERIALS

CONCRETE: $f'_c = 3000$ PSI
GROUT: $f'_c = 2500$ PSI
MORTAR: 1800 PSI (TYPE S)
MASONRY: $f_m = 1500$ PSI
REINFORCING: GRADE 60

- LEGEND
- EXISTING STANDARD CURB & GUTTER
 - PROPOSED STANDARD CURB & GUTTER
 - EXISTING GROUND CONTOUR
 - PROPOSED GROUND CONTOUR
 - PROPOSED WHEELCHAIR RAMP
 - PROPOSED SPOT ELEVATION
 - PROPOSED FLOW DIRECTION
 - PROPOSED WATER BLOCK
 - TEMPORARY EROSION CONTROL BERM
 - PROPOSED UTILITY MANHOLE
 - PROPOSED DROP INLET
 - PROPOSED RETAINING WALL



AT
TOWNE PARK PLAZA

RETAINING WALL AND
GRADING DETAILS

Project Number: 4028/4029
Date: 9/9/14
AVID ENGINEERING, INC.
Civil/Structural/Transportation
Rico Segura, P.E. (602) 498-1502
Sheet Number: C5



Federal Emergency Management Agency

Washington, D.C. 20472

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Jim Baca
Mayor, City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

IN REPLY REFER TO:
Case No.: 00-06-420P

Community: City of Albuquerque, NM
Community No.: 350002
Panels Affected: 35001C0358 D and 0359 D
Effective Date of **JUL 13 2000**
This Revision:

102-I-A-C

Dear Mayor Baca

This responds to a request that the Federal Emergency Management Agency (FEMA) revise the effective Flood Insurance Rate Map (FIRM) for Bernalillo County, New Mexico and Incorporated Areas (the effective FIRM for your community), in accordance with Part 65 of the National Flood Insurance Program (NFIP) regulations. In a letter dated December 17, 1999, Ms. Susan M. Calongne, P.E., City/County Floodplain Administrator, City of Albuquerque/Bernalillo County, requested that FEMA revise the FIRM to show the effects of placement of fill and grading associated with construction of HomeBase at Towne Park Plaza southeast of the intersection of Interstate Highway 40 (I-40) and Eubank Boulevard and construction of a 48-inch-diameter culvert beneath I-40 approximately 1,020 feet east of Eubank Boulevard. The 48-inch-diameter culvert was constructed to intercept the offsite flows from the area to the east of the HomeBase development and to divert the flows to the I-40 Channel. The onsite flows from the HomeBase development drain to the north to the I-40 Channel through two existing reinforced-concrete pipe culverts, one 36-inch-diameter and one 24-inch-diameter, and to the west through the existing 72-inch-diameter storm drain.

All data required to complete our review of this request were submitted with letters from Ms. Calongne and Mr. Edward H. Martinez, P.E., Principal Engineer, Zia Engineering and Environmental Consultants, Inc.

We have completed our review of the submitted data and the flood data shown on the effective FIRM. We have revised the FIRM to modify the elevations, floodplain boundary delineations, and zone designations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) in an approximately 500-foot-long by 400-foot-wide L-shaped area located southeast of the intersection of Eubank Boulevard and I-40. As a result of the modifications, the width of the Special Flood Hazard Area (SFHA), the area that would be inundated by the base flood, decreased. In addition, we have established base flood elevations (BFEs) and changed the zone designation for the remaining SFHA located between approximately 250 feet east and approximately 500 feet east of Eubank Boulevard and between approximately 200 feet south and approximately 100 feet south of I-40. This SFHA, formerly designated Zone A with no BFEs determined, now is designated Zone AE with BFEs determined. At the location where flows are diverted to the I-40 Channel, the base flood is contained in the culverts. The modifications are shown on the enclosed annotated copies of FIRM Panel(s) 35001C0358 D and 35001C0359 D. This Letter of Map Revision (LOMR) hereby revises the above-referenced panel(s) of the effective FIRM dated September 20, 1996.

The basis of this LOMR is, in whole or in part, a culvert project. NFIP regulations, as cited in Paragraph 60.3(b)(7), require that communities ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management regulations. Consequently, the ultimate responsibility for maintenance of the culverts rests with your community.

This determination has been made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and is in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed minimum NFIP criteria. These criteria are the minimum and do not supersede any State or local requirements of a more stringent nature. This includes adoption of the effective FIRM to which the regulations apply and the modifications described in this LOMR. Our records show that your community has met this requirement.

A Consultation Coordination Officer (CCO) has been designated to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Frank Pagano
Director, Mitigation Division
Federal Emergency Management Agency, Region VI
Federal Regional Center, Room 206
800 North Loop 288
Denton, Texas 76201-3698
(940) 898-5127

FEMA makes flood insurance available in participating communities; in addition, we encourage communities to develop their own loss reduction and prevention programs. Through the *Project Impact: Building Disaster Resistant Communities* initiative, launched by FEMA Director James Lee Witt in 1997, we seek to focus the energy of businesses, citizens, and communities in the United States on the importance of reducing their susceptibility to the impact of all natural disasters, including floods, hurricanes, severe storms, earthquakes, and wildfires. Natural hazard mitigation is most effective when it is planned for and implemented at the local level, by the entities who are most knowledgeable of local conditions and whose economic stability and safety are at stake. For your information, we are enclosing a copy of a pamphlet describing this nationwide initiative. For additional information on *Project Impact*, please visit our Web site at www.fema.gov/impact.