HYDROLOGY K11/D25 MINI STORAGE WAREHOUSE

K11/D25

MINI STORAGE

WAREHOUSE

3 PLANS

K11-D25

Aug 28, 1984
4801 Central NW
Albq. NM

To: Hydrology Dept.
City of Albuquerque, NM

From; Irving J Hall, Owner
West Central Self Storage
4801 Central N.W.

On July 24, 1984, I wrote you a letter informing your office of the paving problem we had at our Mini-Storage project at the above address. Star Paving did the job, but did not follow the city approved plans. Your office allowed me to obtain a temporary certificate of occupancy. Since my last letter, I have had my attorney working on the problem with Joe Cruz, owner of Star Paving. Mr. Cruz has been very difficult to work with and his refusal to make up his mind about what he planned to do or not do has prevented me from correcting the paving problem. My attorney thinks he now has something worked out which will allow me to proceed with getting a new paver. The pavers are quit busy now, but I hope to have one lined up in the near future.

I appreciate your help and patience you have given me on this problem and I will keep you informed of our progress on the problem.

Sincerely
Irving J Hall
Irving J Hall

RECEIVED
AUG 29 1984
HYDROLOGY SECTION

July 24, 1984

TO: Hydrology Dept
City of Albuquerque, N.M.

FROM: Irving J. Hall
Owner, West Central Self Storage

This letter is to inform you that I recognize that the present paving job is not in accordance with the City Approved Plans which were made by Augie Maisman, Hydrology Engineer. I plan to have the paving job re-done within 30 days and have Mr. Moisman certify that the job is in accordance with the City Approved Plans.

Also, in the event that I rent any of the storage units before the paving job is re-done, I will accept responsibility for any claims the tenants might make for damages to their property due to the present improper paving job.

4801 CENTRAL N.W.

FILE
K11-D25

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

FILE COPY

March 1, 1984

Mr. August Mosimann
Engineering Associates, Inc.
1840 Lomas NE
Albuquerque, NM 87106

REF: GRADING AND DRAINAGE PLAN FOR MINI STORAGE WAREHOUSE (K11-D25)
RECEIVED FEBRUARY 13, 1984

Dear Mr. Mosimann:

The above referenced plan is approved. For future reference, please date your signature so that reference can be made to a specific plan should there be revisions associated with the submittal.

Please attach a copy of this plan along with the approved "Construction Within Public R/W" document to the construction set prior to issuance of the building permit.

If I can be of further assistance, please contact me at 766-7644.

Yours truly,

Billy J. Goolsby

Billy J. Goolsby, PE
City/County Flood Plain Admin.

BJG:mrk

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

HYDROLOGY SECTION PROJ. NO. K11 DATE: 12/13/83

PLANNING DIVISION NO. _____

CONFERENCE RECAP

SUBJECT: Storage Units for Lot 1 of West Alb. Business Addition

ATTENDANCE: WHO	REPRESENTING
John Armstrong	City
Angie Moussa	Engineering Assoc.

FINDINGS:

(1) Drainage Plan Required

(2) Free discharge allowed to storm drain w/ emergency spillway to control required in case HGL in storm drain is above street level.

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

SIGNED: [signature]	SIGNED: Angie L. Moussa
TITLE: Chf Hydrology	TITLE: Engineer
DATE: 12/13/83	DATE: 12/13/83

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

INFORMATION SHEET

PROJECT TITLE Mini Storage warehouse Project 4805 CENTRAL N.W. 87

TYPE OF SUBMITTAL Grading Plan and Drainage Report

ZONE ATLAS PAGE NO. K 11 CITY ADDRESS 4805 CENTRAL NW

LEGAL DESCRIPTION Portion of Lot 1, West Albuquerque Business Addition

ENGINEERING FIRM Engineering Associates, Inc. CONTACT August F. Mosimann, P.E.

ADDRESS 1340 Lomas N. E. PHONE 242-7522

OWNER Irving J. Hall CONTACT Irving J. Hall

ADDRESS 9805 Aztec Rd. N. E. PHONE 296-8617

ARCHITECT Rick Bennett Architect CONTACT Rick Bennett

ADDRESS 525 Buena Vista SE 87106 PHONE 821-3950 or 848-1616

SURVEYOR Rodriguez and Associates CONTACT George Rodriguez

ADDRESS 11035 Central Avenue NE, Suite B PHONE 296-3976

CONTRACTOR DENNIS CHAVEZ CONTACT DENNIS CHAVEZ

ADDRESS PHONE 884-7066

PRE-DESIGN MEETING:

✓ YES
___ NO
✓ COPY OF CONFERENCE RECAP SHEET PROVIDED

PLEASE CHECK TYPE OF APPROVAL EXPECTED WITH THIS SUBMITTAL:

___ SKETCH PLAT APPROVAL
___ PRELIMINARY PLAT APPROVAL
___ SITE DEVELOPMENT PLAN APPROVAL
___ FINAL PLAT APPROVAL
✓ BUILDING PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY APPROVAL
___ ROUGH GRADING PERMIT APPROVAL
___ GRADING/PAVING PERMIT APPROVAL
___ OTHER_____(SPECIFY)

DATE SUBMITTED Jan 16, 1984

BY August F. Mosimann, P. E.
for
Engineering Associates, Inc.

RECEIVED FEB 1 5 1984 HYDROLOGY SECTION

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

HYDROLOGY SECTION PROJ. NO. K11 DATE: 12/13/83

PLANNING DIVISION NO. _____

CONFERENCE RECAP

SUBJECT: Storage Units for Lot 1 of West Alby Business Addn.

ATTENDANCE:	WHO	REPRESENTING
	John Armstrong	City
	Angie Meissner	Engineering Assoc.

FINDINGS:

(1) Drainage Plan Required

(2) Free discharge allowed to storm drain w/ emergency spillway to central required in case HGL in storm drain is above street level.

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

SIGNED: John Armstrong
TITLE: City Hydrology
DATE: 12/13/83

SIGNED: Angie T. Meissner
TITLE: Engineer
DATE: 12/13/83

RECEIVED FEB 13 1984 HYDROLOGY SECTION

DRAINAGE REPORT

FOR

A MINI STORAGE WAREHOUSE PROJECT
West Central Avenue

Owner: Irving J. Hall

AUGUST F. MOSIMANN
STATE OF
NO. 6148
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

PROJECT DESCRIPTION

New construciton will include 15000 Sq. Ft. of buildings with 21103 Sq. Ft. of paving and a small amount of landscaping. The storm runoff will be allowed to discharge freely into a drop inlit in Central avenue which fronts the site on the south. An emergency spillway over the driveway will be provided.

LEGAL DESCRIPTION

Portion of Lot 1, West Albuquerque Bisiness Addition

EXISTING SITE STUDY

The site is contains aproximately 18000 Sq. Ft. of old asphalt and concrete with the remainder being undeveloped raw land.

The area is 36103 Sq. Ft.(0.829 Acres)
The impervious portion is 49%
The soil classification is "B", Gb
(Soil Survey Sheet 30)
The "C" factor is 0.58
(Plate 22.2 C-1)
The runoff length is 300 ft.
The slope is 0.6%
The Concentration time is .0078x(300^.77)/(.008^.385)=4.04 min
(10 min minimum)
The average velocity is 300/(10x60)=.5 ft/sec
The 100 year-6 hour precipitation amount is 2.2 in.
(Plate 22.2 D-1)
The 10 year-6 hour precipitation amount is 2.2x0.657=1.45 in.
(Plate 22.2 D-1)
The 100 year intensity is 2.15x2.2=4.73 in/hr.
The 10 year intensity is 2.15x1.45=3.12 in/hr.
The 100 year flow rate is Q=CxIxA=0.58x4.73x0.829=2.27 cfs
The 10 year flow rate is Q=CxIxA=0.58x3.12x0.829=1.50 cfs.
The 100 year volume is V=CxPxA=0.58x2.2x36103/12=3839 cu. ft.
The 10 year volume is V=CxPxA=0.58x1.45x36103/12=2530 cu ft.

This runoff flows from north to south and ponds at the south end.

OFFSITE FLOWS

There are no offsite flows affecting the undeveloped site. The developed site which will be connected to a storm sewer in Central Avenue may experience some offsite flow through the connecting pipe if the Hydraulic Grade Line for the storm sewer becomes higher than the site. In case this happens an emergency spillway over the driveway back into Central Avenue will be provided.

DEVELOPED SITE STUDY

The entire site is impervious.

The area is 36103 Sq. Ft.(0.829 Acres)
The impervious portion is 100%
The soil classification is "B", Gb
(Soil Survey Sheet 30).
The "C" factor is 1.00
(Plate 22.2 C-1)
The runoff length is 300 ft.
The slope is 0.6%
The Concentration time is .0078x(300^.77)/(.008^.385)=4.04 min
(10 min minimum)
The average velocity is 300/(10x60)=.5 ft/sec
The 100 year-6 hour precipitation amount is 2.2 in.
(Plate 22.2 D-1)
The 10 year-6 hour precipitation amount is 2.2x0.657=1.45 in.
(Plate 22.2 D-1)
The 100 year intensity is 2.15x2.2=4.73 in/hr.
The 10 year intensity is 2.15x1.45=3.12 in/hr.
The 100 year flow rate is Q=CxIxA=1.0x4.73x0.829=3.92 cfs
The 10 year flow rate is Q=CxIxA=1.0x3.12x0.829=2.59 cfs.
The 100 year volume is V=CxPxA=1.0x2.2x36103/12=6618 cu. ft.
The 10 year volume is V=CxPxA=1.0x1.45x36103/12=4362 cu ft.

FLOOD CONTROL

A catch basin will be provided at the south end on the site. It will be connected to the storm sewer in Central avenue by means of a 12 inch concrete pipe(See attached drawing). The pipes flow characteristics, in accordance with the Manning Equation, are as follows:

V=(1.49)xRh^(2/3)xS^(1/2)

n=0.013
Area A=0.79 Sq. Ft.
Wetted Perimeter P=3.14 Ft.
Hydraulic Radius Rh=A/P=0.25 Ft.
Slope S=0.015
Velocity V=5.57 fps
Flow Rate Q=VxA=4.38cfs

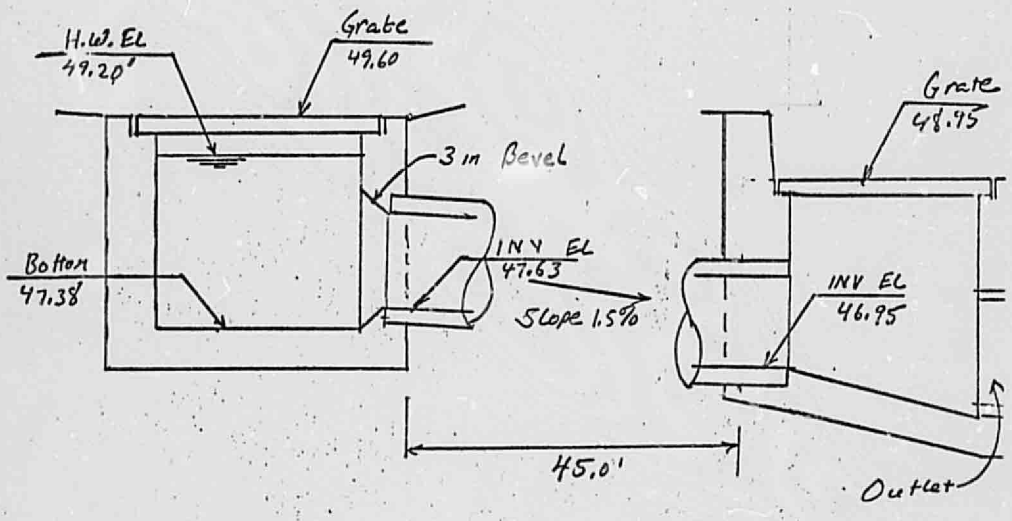
This is greater than the 100 year flow rate of 3.92 cfs.
transition between the concrete box and the pipe [illegible] by making a beveled

(V^2)/(2*g)=(5.57^2)/2*32.2=0.482 Ft.

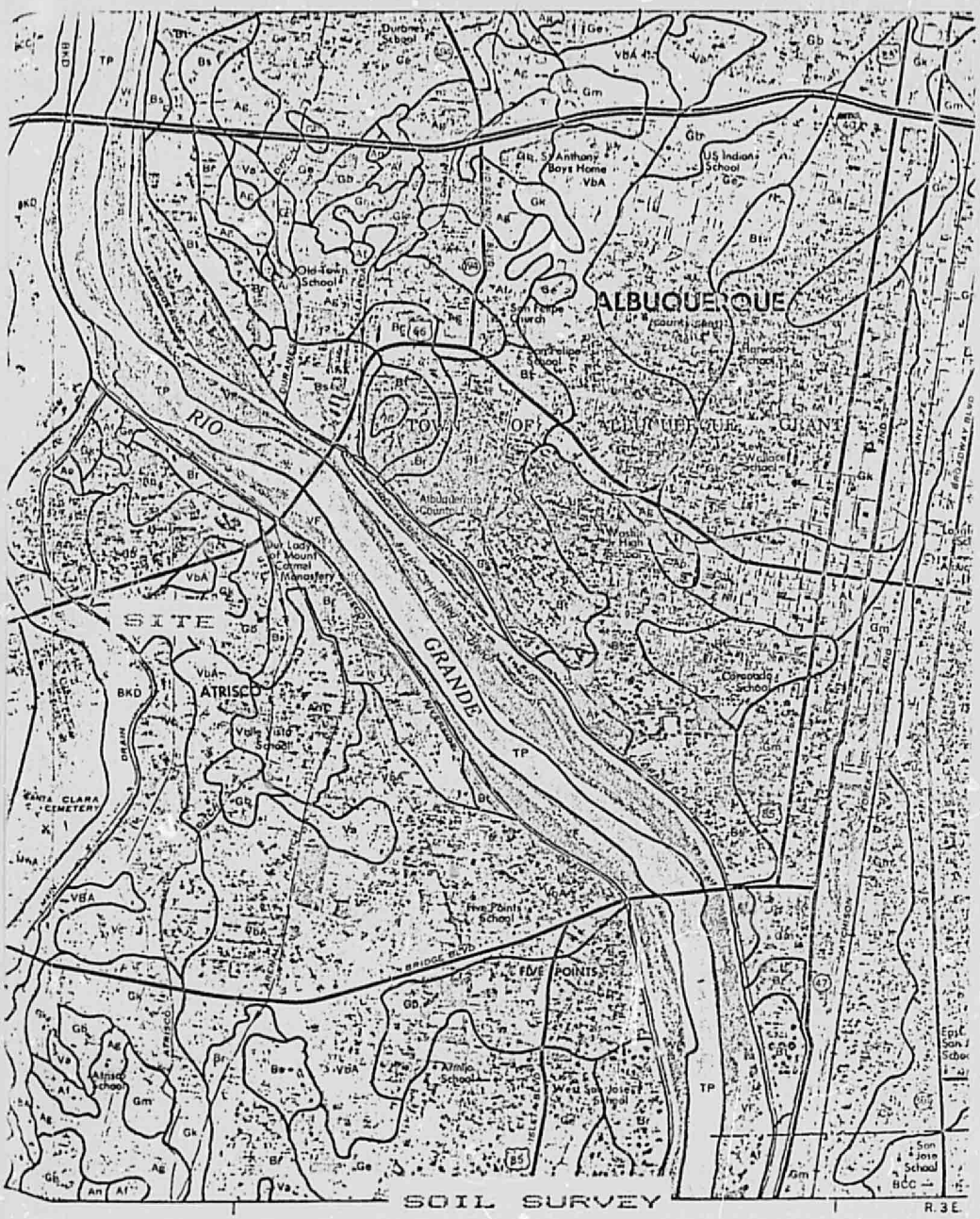
Kl=0.18(bevelled entrance)

hl@inlet=1.18*(V^2)/(2*g)=0.569 Ft.

The entrance invert elevation is 47.63 Ft.
The high water elevation is 49.20 Ft.
The grate elevation is 49.60 Ft.
The freeboard is 0.4 Ft.

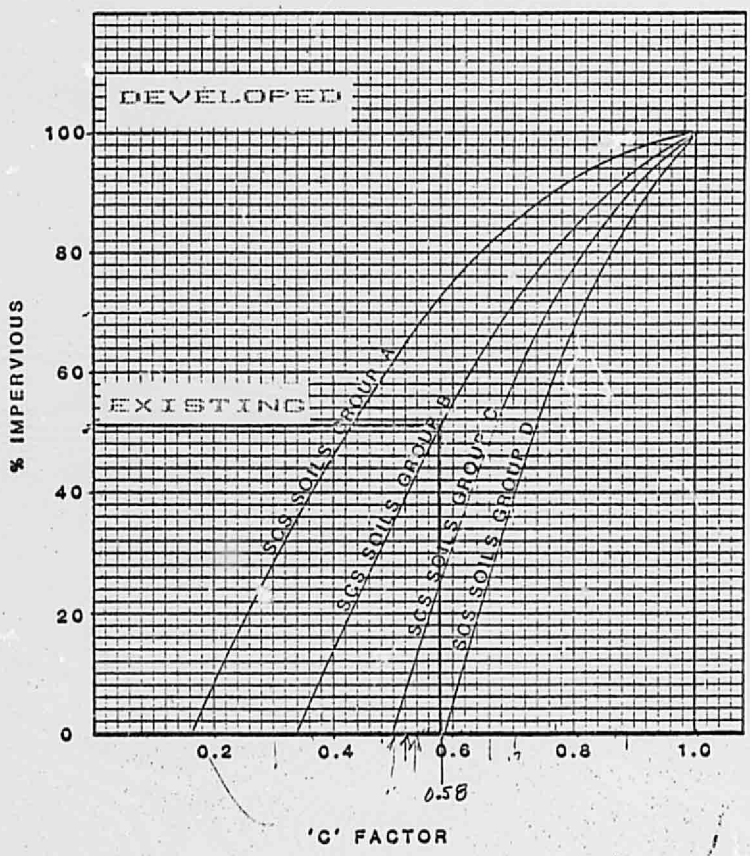


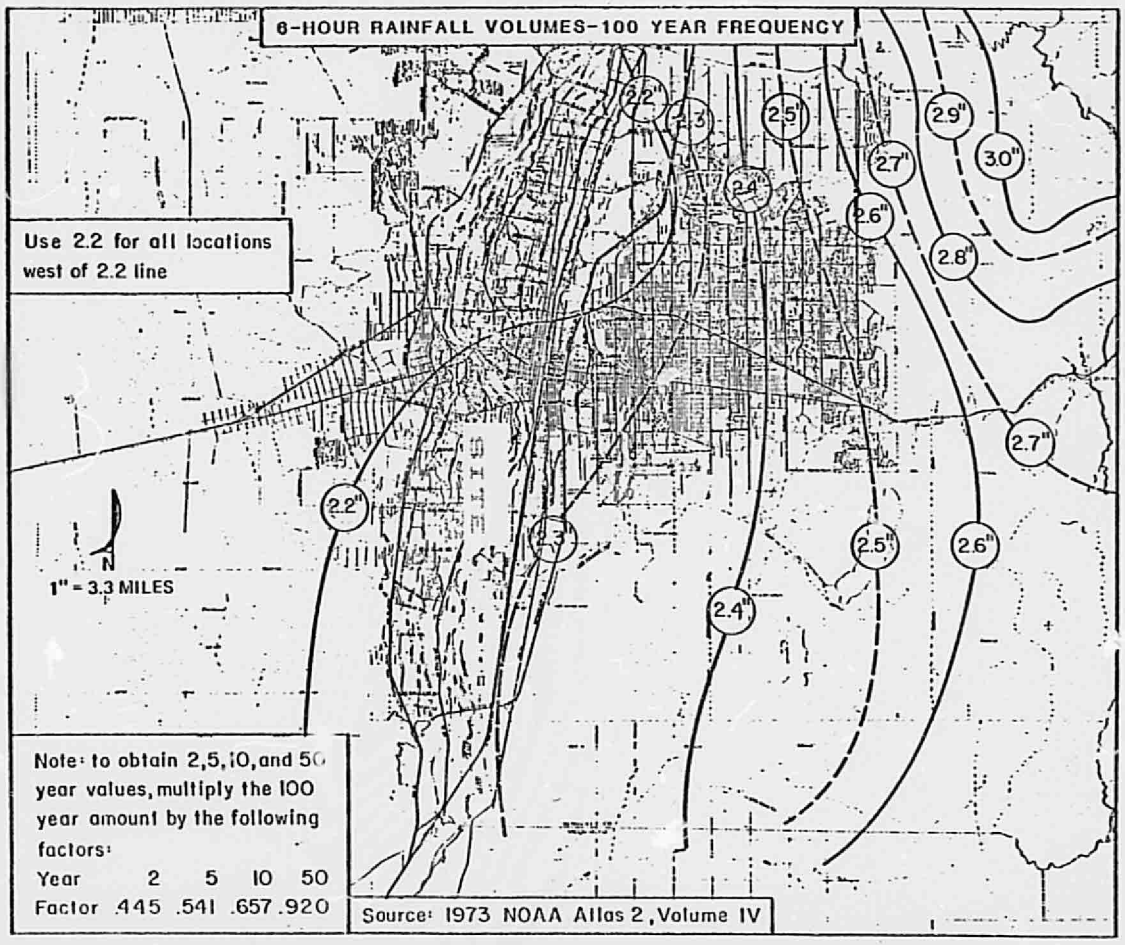
FEB 12 1991


ALBUQUERQUE
TOWN OF ALBUQUERQUE GRANT
RIO GRANDE
SITE
ATRISCO
FIVE POINTS
Old Town School
Durbin School
St. Anthony Boys Home
US Indian School
San Felipe Church
Our Lady of Mount Carmel Monastery
Valley Vista School
Five Points School
Atrisco School
Junior School
West San Jose School
San Jose School
Coronado School
Wallace School
Harwood School
Albuquerque Country Club
Santa Clara Cemetery
Bridge Blvd
Drain
Atrisco
Jefferson
Broadway Blvd
Rio Grande Blvd
Ladera
Clark
Durbin
Isleta
Pino
Ranchitos
Ave
Rd
Dr
Blvd
Ln
Pl
Ct
Cir
Tr
Sq
Ter
Way
Pkwy
Hwy
Fwy
Exp
Trl
Bl
Mall
Plaza
Park
Center
Square
Terrace
Circle
Court
Place
Lane
Road
Drive
Avenue
Boulevard
Highway
Freeway
Expressway
Parkway
Trail

DRAINAGE CRITERIA

DETERMINATION OF RATIONAL FORMULA 'C' FACTOR

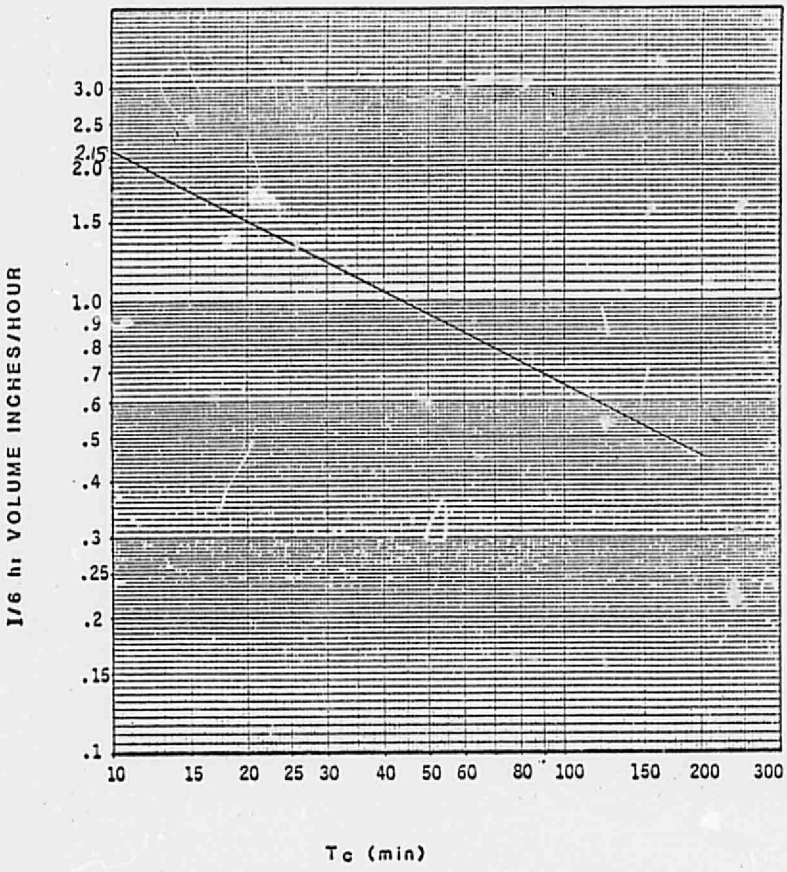




THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

DIMENSIONLESS RAINFALL INTENSITIES

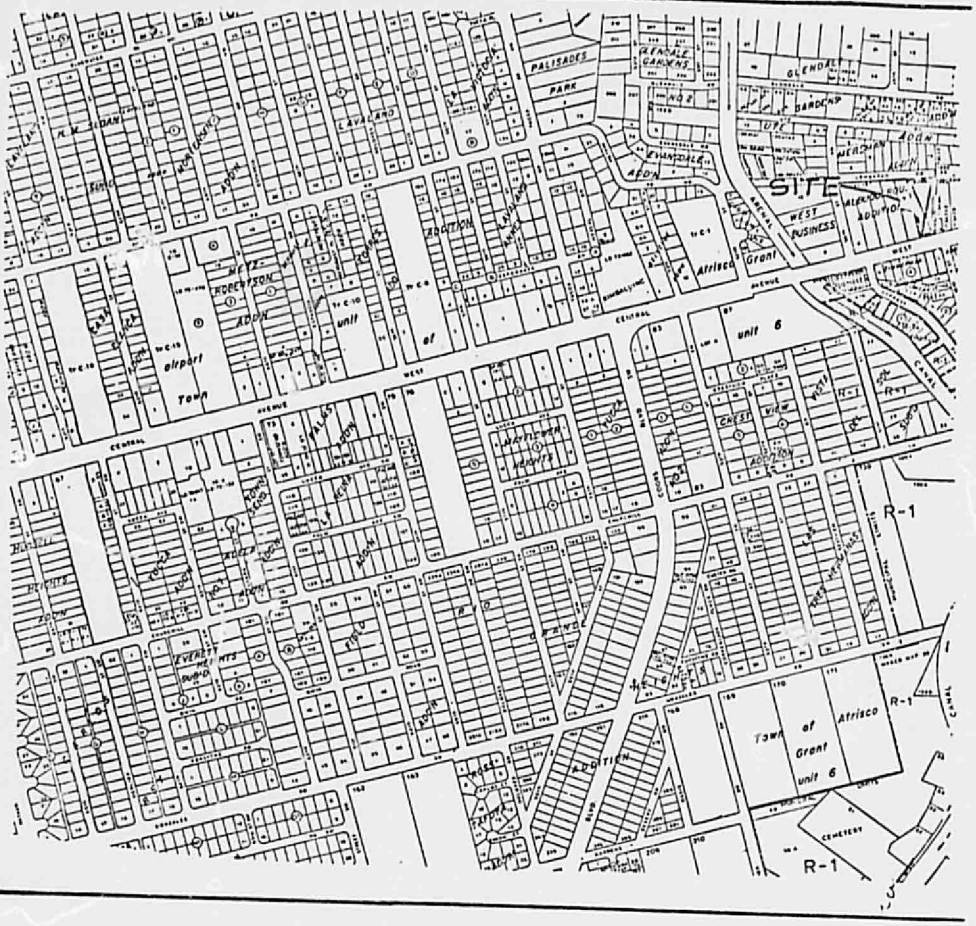
$I = (6\text{-hr. rain})6.84\ t_c^{-0.51}$



note: To get actual intensities, multiply rainfall volume from plate D-1 by value from curve. Use reduction factors on Plate D-1 for other than 100-yr.

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



NOTICE TO CONTRACTOR

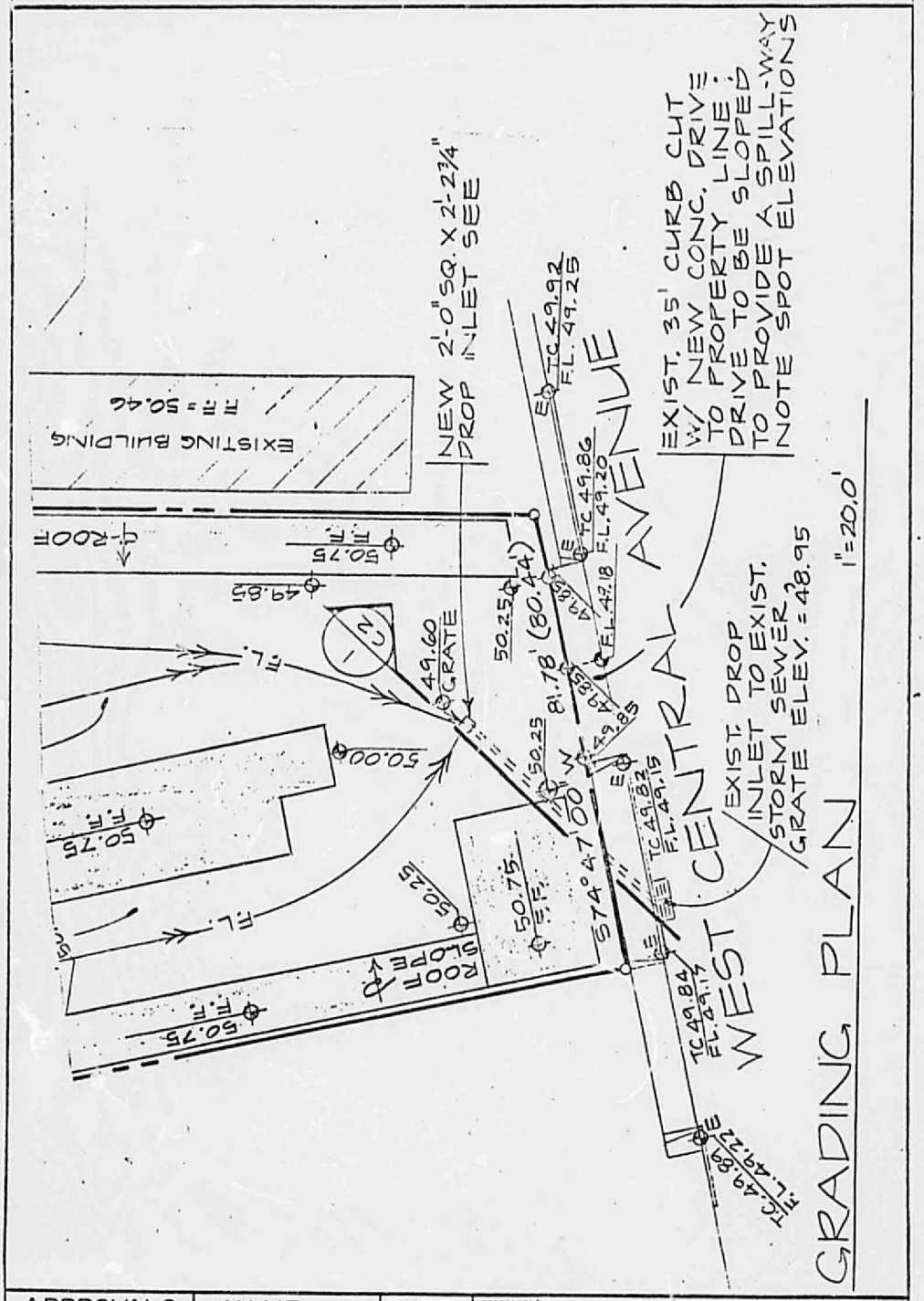
1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with "Contract Documents for City-Wide Utilities and Cash Paving No. _____"
3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to _____ street use.

APPROVALS	NAME	DATE	TITLE:
A.C.E./DESIGN			
INSPECTOR			
A.C.E./FIELD			PERMIT NO. SHEET OF MAP NO.

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

CITY OF ALBUQUERQUE

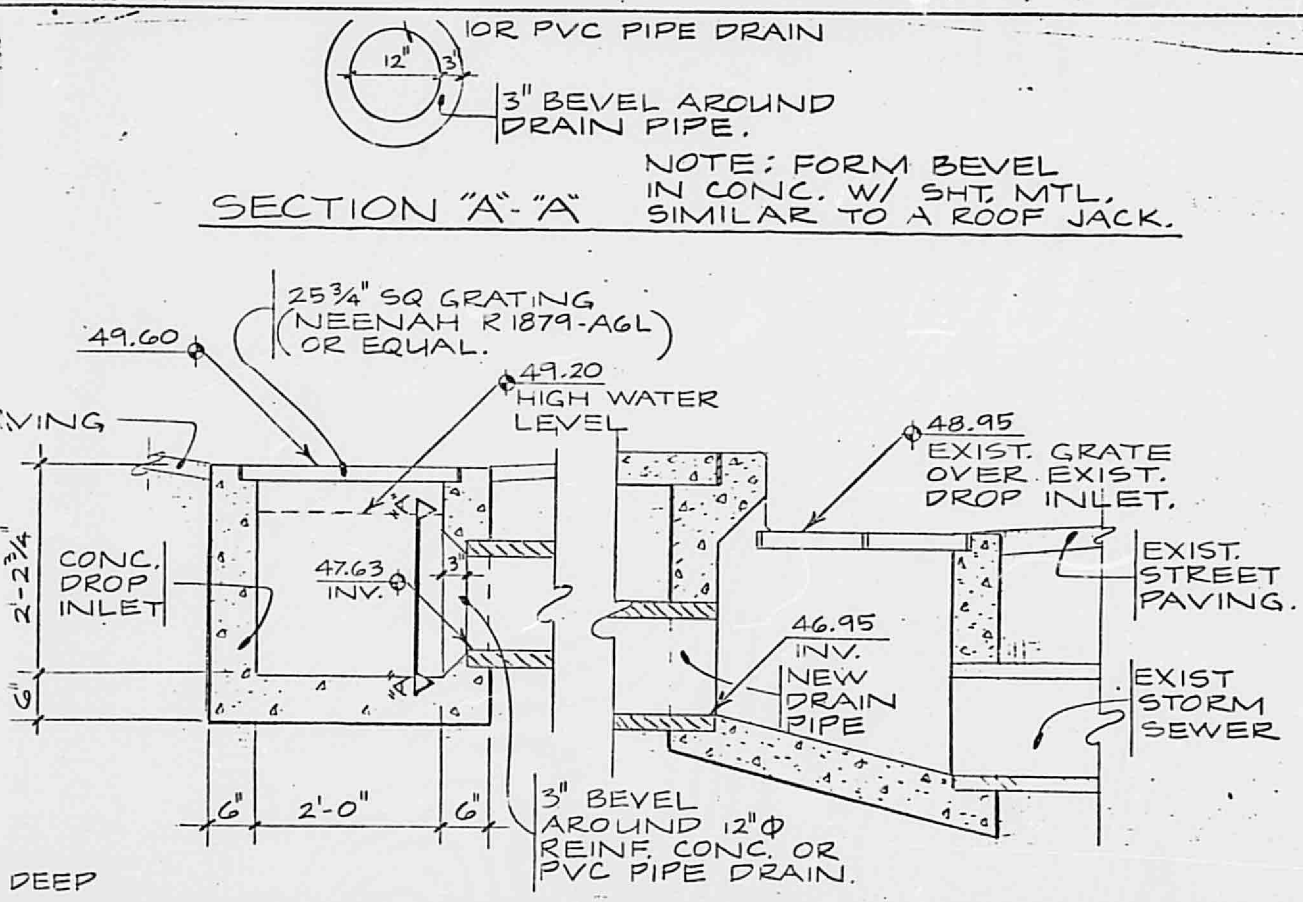
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



APPROVALS	NAME	DATE	TITLE:
A.C.E./DESIGN			
INSPECTOR			PERMIT NO. / MAP

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



NOTE: NEW DRAIN PIPE TO HAVE 1.5% SLOPE, & 45'-0" MAX.

1 DROP INLET & DRAIN PIPE DETAILS.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

TITLE:

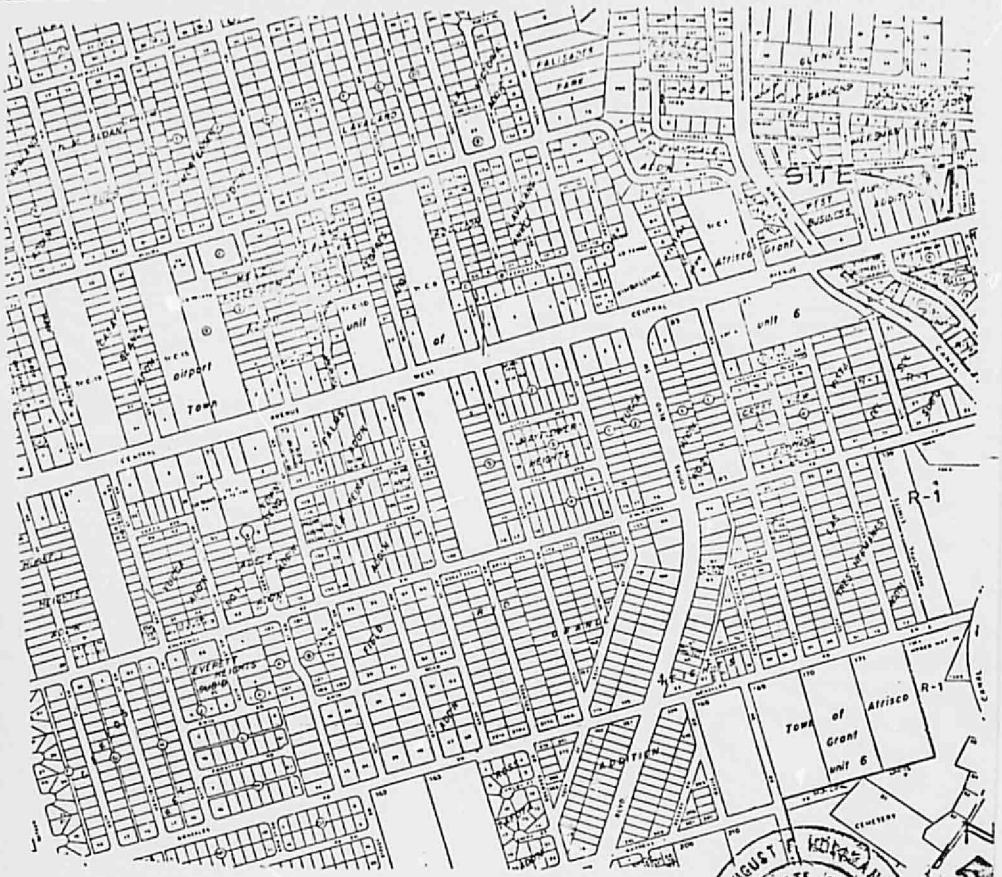
PERMIT NO.

SHEET OF

MAP NO.

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



K11-D25

NOTICE TO CONTRACTOR

AUGUST H. HERRMANN STATE OF NEW MEXICO 5168 REGISTERED PROFESSIONAL ENGINEER

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.

2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with ~~"Contract Documents for City-Wide Utilities and Cash Paving No. _____"~~ Public Works Contract No 84-1

3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.

4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.

5. Backfill compaction shall be according to ARTERIAL street use.

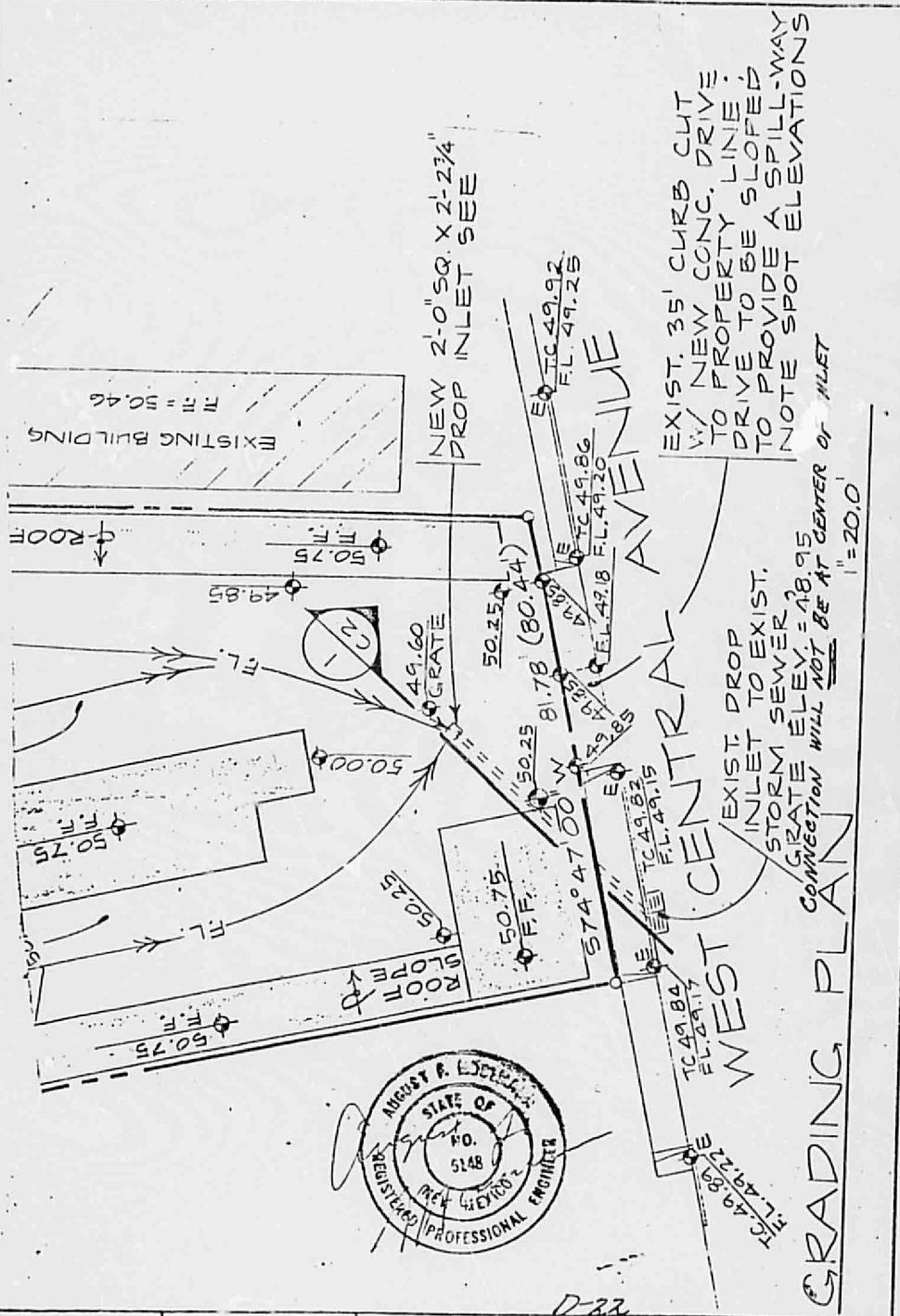
Permit NO. 14095 New Concepts INC. D-22

APPROVALS	NAME	DATE	TITLE: MINI STORAGE WAREHOUSE 4805 WEST CENTRAL
A.C.E./DESIGN	[illegible]	6 FEB 84	
INSPECTOR	Ernest B. Vallejo	7/31/84	PERMIT NO.
A.C.E./FIELD	W. J. McManus	8/1/84	SHEET 1 OF 3 — MAP NO. K-11

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



D-22

APPROVALS	NAME	DATE
A.C.E./DESIGN	[illegible]	6 Feb 84
INSPECTOR	Everett B. Vallejos	7/31/84
A.C.E./FIELD	W. F. McNamara	8/1/84

TITLE: MINI STORAGE WAREHOUSE
4805 WEST CENTRAL

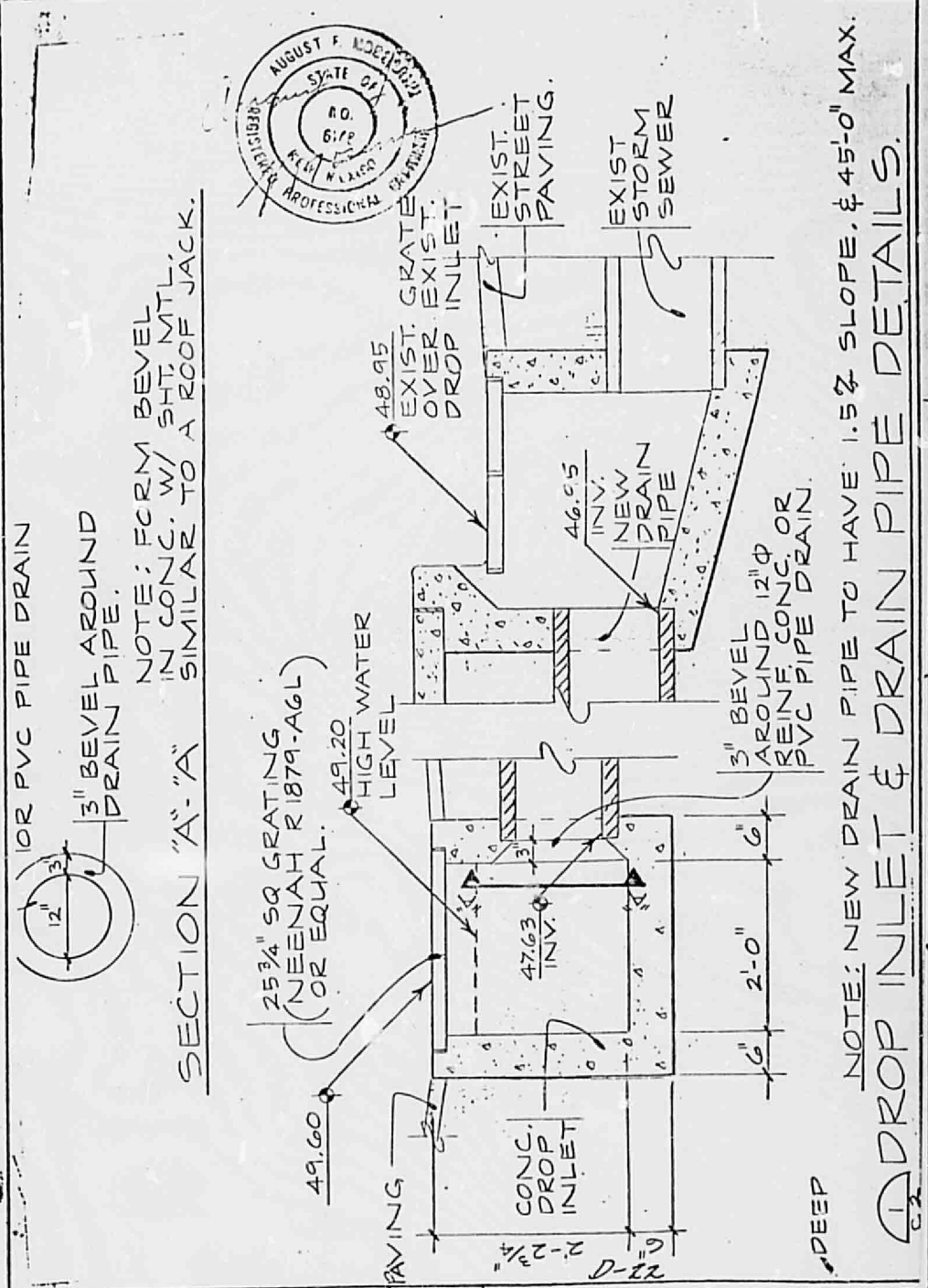
PERMIT NO.

SHEET 2 OF 3

MAP NO. K-11

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



APPROVALS	NAME	DATE	TITLE: MINI STORAGE WAREHOUSE 4805 WEST CENTRAL	
A.C.E./DESIGN	G. Kellett	6 FEB 84		
INSPECTOR	Everett B. Vallejos	7/31/84	PERMIT NO.	MAP NO. K-11
A.C.E./FIELD	W.T. McNamara	8/1/84	SHEET 3 OF 3	