HYDROLOGY

M18/D7

M18/D7

LOVELACE

MEDICAL CENTER

6-PLANS

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

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

September 19, 1985

Don Powell
Kevin Tucker & Assoc. Inc.
312 19th Ave. No.
Nashville TN 37203

REF: LOVELACE MEDICAL CENTER (M18-D7) RECEIVED AUGUST 5, 1985

Dear Mr. Powell:

Based on the information provided on your August 5, 1985 submittal, we are unable to process your request at this time due to the requirements not being designed to DPM criteria. Attached you will find a copy of Section seven, procedures for drainage submittals which will assist you in preparing your resubmittal.

If I can be of further assistance, please feel free to call me at (505) 766-7644.

Sincerely,

Bernie J. Montoya

Bernie J. Montoya
Engineering Assistant
Hydrology

BJM/cl

P.S. Please route resubmittal to
the City Hydrology Section
123 Central NW
Albuquerque, NM 87103

DRAINAGE INFORMATION SHEET

PROJECT TITLE: LOVELACE MEDICAL CENTER ZONE ATLAS/DRNG. FILE #: M18/D7

LEGAL DESCRIPTION: TRACT OF LAND SITUATED IN THE N½, NW¼ SEC. 26, T10N, R3E

CITY ADDRESS: 5400 GIBSON BLVD S.E. ALBUQUERQUE, N.M. 87108

ENGINEERING FIRM: KEVIN TUCKER & ASSOCS., INC. CONTACT: MARK FIORAVANTI / DON POWELL

ADDRESS: 312 19TH AVE NORTH / NASHVILLE, TENN. 37203. PHONE: 615-320-0091

OWNER: LOVELACE MEDICAL CENTER CONTACT: FRANK YOUNG

ADDRESS: 5400 GIBSON BLVD S.E. PHONE:

ARCHITECT: GOULD TURNER GROUP CONTACT: GREGORY HICKS

ADDRESS: NASHVILLE, TENN. PHONE: (505) 243-7492

SURVEYOR: TOM MANN & ASSOCS CONTACT: TOM MANN

ADDRESS: 811 DALLAS NE ALBUQ. PHONE: 265-5611

CONTRACTOR: ROGERS CONSTRUCTION CONTACT: STEVE MEEKS

ADDRESS: PHONE:

RECEIVED SEP 24 1985 HYDROLOGY SECTION

PRE-DESIGN MEETING:

✓ YES

___ NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ___

EPC NO. Z-85-73-1

PROJ. NO. ___

TYPE OF SUBMITTAL:

✓ DRAINAGE REPORT

✓ DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

✓ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

✓ BUILDING PERMIT APPROVAL

✓ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER ___ (SPECIFY)

DATE SUBMITTED: 9/24/85

BY: GREGORY T. HICKS

kta

kevin tucker and associates, inc.

planners • landscape architects • engineers • surveyors
312 19th avenue north / nashville, tennessee 37203 / 615-320-0091

23 September 1985

RECEIVED
SEP 24 1985
HYDROLOGY SECTION

Mr. Billy J. Goolsby
The City of Albuquerque Engineering Division
Municipal Development Department/Hydrology Section
123 Central N.W.
Albuquerque, NM 87102

RE: KTA #85132
Lovelace Medical Center Construction Documents

Dear Mr. Goolsby:

Please find enclosed 2 sets of prints: one containing prints of the site survey with prints of the existing and proposed drainage area plan as submitted to Mr. John Messier of the Municipal Development Department/Planning Division on July 30, 1985 and the second set is a set of the civil prints as released to the contractor on September 16, 1985 with the addition of a silt fence as per our conversation.

I understand that the turn around time on your review may be as much as 1 month; however, any assistance you can give us in reducing that time will be greatly appreciated.

If you should have any questions, or require any further information, please don't hesitate to call.

Sincerely,

Don Powell

Don Powell
Project Manager
Engineering

DP/sjm

Enclosures

cc: Mark Fioravanti
Steve Hulsey
Jim Knuckey

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

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

October 18, 1985

Mr. Don Powell
Keven Tucker & Associates, Inc.
312 19th Avenue North
Nashville, Tennessee 37203

REF: DRAINAGE REPORT FOR LOVELACE MEDICAL CENTER MODIFICATIONS (M18-D7)
RECEIVED SEPTEMBER 23, 1985

Dear Mr. Powell:

I have reviewed the above referenced submittal and forward the following comments:

1. The drainage analysis associated with this submittal is acceptable and hereby is approved.

2. The plan, as submitted, is not of sufficient detail for inclusion in a set of construction plans for Hydrology sign-off. The plan is to be used by the contractor to complete the site work and for our inspector to review and approve by. Please refer to the appropriate plan drawing checklist in the DPM for preparation of an acceptable plan.

3. If you have not previously done so, the sidewalk culverts that I understand are to be used, require a separate permit. This permit is acquired by preparing a document entitled "Private Drainage Facilities Within City Right-of-Way/Easement". This document is then submitted to City Design Section for review and approval. Three (3) approved copies will be returned, two (2) of which are to be attached to the Building Permit sets and the third one goes to a bonded contractor to get the permit with.

Also these sidewalk culverts are not clearly identified on the plan. I only am aware of them through discussions with the contractor. Discharge across the right-of-way is not allowed. Discharge may only leave the site through driveways, storm drains or sidewalk culverts.

4. A landscaping planned adjacent to City Right-of-Way will be required to be slightly depressed to insure nuisance water (irrigation) remains on-site.

Should you have any questions or comments, please call this office.

Cordially,

Calvin A Martyn
for Billy J. Goolsby, PE
Civil Engineer/Hydrology

BJG:mrk

Pre-Design Investigation
(Additions)

DATE 2-6-86

ADDRESS 5400 GIBSON SE ZONE ATLAS # M18/D7

LEGAL DESCRIPTION LOVELACE HOSPITAL

OWNER

ARCHITECT/ENGINEER

LOT SIZE

ZONING

PROPOSED DEVELOPMENT 1200 ♯ ADDITION.

RECEIVED
FEB 06 1986
HYDROLOGY SECTION

	YES	NO	NA	COMMENTS
FLOOD HAZARD AREA	✓			ADJACENT TO FLOO ZONE AO-1' ALONG GIBSON
PART OF AN APPROVED REPORT				AREA APPEARS ON DRAINAGE PLAN FOR LOVELACE ADDN.
CONSTRUCTION PLANS ON MICRO-FILM				
FIELD INSPECTION	✓			

COMMENTS:

SITE IS CURRENTLY ± 24" LOWER THAN SURROUNDING PROPERTY. DRAINAGE PRETTY WELL ESTABLISHED ON LOVELACE HOSPITAL SITE. RECOMMEND ELEVATING GRADE OVER 2' FOR SAFETY.

DRAINAGE REQUIREMENTS:

SITE PLAN SHOWING F.F. ELEV. @ MIN. OF 2' ABOVE CURB AT GIBSON. ALSO WILL REQUIRE SURVEYOR CERT. UPON COMPLETION CERTIFYING AS-BUILT F.F. ELEV. (℄ CURB (TC) ELEV.)

Tom Mann Associates, Inc.
Engineers
811 DALLAS, N.E. • ALBUQUERQUE • NEW MEXICO • 87110 • 505-265-5611

50424
March 17, 1986

Mr. Al Treichel
% Amberley Suite Hotel
7620 Pan American Freeway N.E.
Albuquerque, NM 87109

Re: Finished Floor Certification

Dear Al:

This letter is to certify that the finished floor elevation for the MRI facility at Lovelace Medical Center is 5308.18. The top of curve elevation in Gibson, adjacent to the building is approximately 5303.8

If you have any further questions or comments, please do not hesitate to call. Thank you.

Sincerely,

TOM MANN & ASSOCIATES, INC.

Thomas T. Mann, Jr. P.E.
President

TTM:djj

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Lovelace Medical Center ZONE ATLAS/DRNG. FILE #: M18-D7

LEGAL DESCRIPTION: SEE ATTACHMENT

CITY ADDRESS: 5400 GIBSON BOULEVARD, ALBUQUERQUE, NEW MEXICO 87108

ENGINEERING FIRM: KEVIN TUCKER & ASSOCIATES, INC. CONTACT: MR. CURTIS CATRON

ADDRESS: 312 19th AVENUE, NORTH, NASHVILLE 37203 PHONE: 615-320-0091

OWNER: LOVELACE MEDICAL CENTER CONTACT: MR. FRANK YOUNG

ADDRESS 5400 GIBSON BOULEVARD, ALBUQUERQUE PHONE: 505-262-7325

ARCHITECT: GOULD TURNER GROUP, P.C. CONTACT: MR. STEVE DELANEY

ADDRESS: P.O. BOX 121056, NASHVILLE, TN PHONE: 615-383-2360

SURVEYOR: TOM MANN ASSOCIATES, INC. CONTACT: MR. TOM MANN

ADDRESS: 811 DALLAS, N.E., ALBUQUERQUE PHONE: 505-265-5611

CONTRACTOR: RODGERS CONSTRUCTION, INC. CONTACT: MR. GLENN CANTWELL

ADDRESS: P.O. BOX 8406, ALBUQUERQUE, NM PHONE: 505-265-1601

PRE-DESIGN MEETING:

RECEIVED MAY 05 1986 HYDROLOGY SECTION

X YES

____ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ____

EPC NO. Z-85-73-1

PROJECT NO. ____

TYPE OF SUBMITTAL:

X DRAINAGE REPORT

____ DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAIN. PLAN

X GRADING PLAN

____ EROSION CONTROL PLAN

____ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL

____ PRELIMINARY PLAT APPROVAL

____ SITE DEVELOPMENT PLAN APPROVAL

____ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

____ FOUNDATION PERMIT APPROVAL

____ CERTIFICATE OF OCCUPANCY APPROVAL

____ ROUGH GRADING PERMIT APPROVAL

____ GRADING/PAVING PERMIT APPROVAL

OTHER ____ (SPECIFY)

DATE SUBMITTED: 5/1/86

BY: Mark Fioravanti

Rev. 11/84

kta

kevin tucker and associates, inc.

planners • landscape architects • engineers • surveyors
312 19th avenue north / nashville, tennessee 37203 / 615-320-0091

May 1, 1986

RECEIVED
MAY 05 1986
HYDROLOGY SECTION

Mr. Billy J. Goolsby
City of Albuquerque
Design Hydrology Section
123 Central NW
Albuquerque, NM 87102

RE: LOVELACE MEDICAL CENTER (M18-D7)
KTA #85132

Dear Mr. Goolsby:

Attached is the revised drainage submittal for the above referenced project. Revisions and additions have been made in accordance with your letter dated October 18, 1985. Should you have any questions or require additional information, please contact me.

Sincerely,

Mark Fioravanti

Mark Fioravanti

MF/jl

cc: Steve Delaney, GTG

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

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

May 13, 1986

Mike Fioravanti
Kevin Tucker & Associates, Inc.
312 19th Avenue North
Nashville, Tennessee 37203

RE: PEVISED DRAINAGE PLAN FOR LOVELACE MEDICAL CENTER
(M-18/D7) RECEIVED MAY 5, 1986

Dear Mr. Fioravanti:

I have received information from the contractor on this project that the work is to be phased. Our standard practice is that if the plan shows complete construction in one phase, then we will not sign-off on any Certificates of Occupancy for any portions until the entire project is complete.

I would recommend that you get together with the owner and the contractor to establish the limits of the different phases and then provide this office with a revised detailed construction grading plan showing the phasing.

Upon receipt and approval of the phasing plan, I will respond with a letter requesting that this revised plan with the revision date be attached to the permit sets for Hydrology sign-off and for the purpose of sign-off on the Certificate of Occupancy as the phases are complete.

It was also brought to my attention that additional work within Gibson Boulevard right-of-way is to be performed. I recommend that the required sidewalk culverts be incorporated in the design and the Work Order permit plans for construction purposes.

Should you have any questions or comments regarding this response or my recommendations, please feel free to give me a call at (505) 766-7644.

Cordially,

Billy J. Goolsby

Billy J. Goolsby, P.E.
C.E./Hydrology Section

cc: Frank Young
Lovelace Medical Center

BJG/bsj

DRAINAGE INFORMATION SH[illegible]

PROJECT TITLE: LOVELACE MEDICAL ZONE ATLAS/DRNG. FILE #: M18/D7

LEGAL DESCRIPTION: TRACT A-1, LOVELACE HOSPITAL

CITY ADDRESS: SAN PEDRO & RIDGECREST

ENGINEERING FIRM: TOM MANN & ASSOCIATES CONTACT: R. PANG

ADDRESS: 811 DALLAS NE. PHONE: 265-5611

OWNER: HOSPITAL CORP. OF AMERICA CONTACT: JIM BORDERS

ADDRESS: PHONE: 2650922

ARCHITECT: CONTACT:

ADDRESS: PHONE:

SURVEYOR: TOM MANN & ASSOCIATES CONTACT: R. PANG

ADDRESS: 811 DALLAS NE. PHONE: 265-5611

CONTRACTOR: ROGERS CONSTRUCTION CONTACT: STEVE MEEK

ADDRESS: PHONE: 265-1601

PRE-DESIGN MEETING:

___ YES

X NO

___ COPY OF CONFERENCE RECORD SHEET PROVIDED

RECEIVED AUG 18 1986 HYDROLOGY SECTION

DRB NO. ___

EPC NO. ___

PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

___ DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

X GRADING PLAN - POWERHOUSE & COGENERATION

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER ___ (SPECIFY)

DATE SUBMITTED: 8/18/86

BY: R C Pang

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

HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

September 9, 1986

Ray Pang
Tom Mann & Associates, Inc.
811 Dallas, NE
Albuquerque, New Mexico 87110

RE: SUBMITTAL FOR ADDITION TO THE POWER HOUSE & CO-GENERATION BUILDING OF LOVELACE MEDICAL CENTER (M-18/D7) RECEIVED AUGUST 18, 1986

Dear Mr. Pang:

The above referenced submittal, dated August 15, 1986, is hereby approved for inclusion in the building permit set.

Please attach a copy of this plan to each set prior to Hydrology sign-off.

If I can be of further assistance, please call.

Cordially,

Billy J. Goolsby

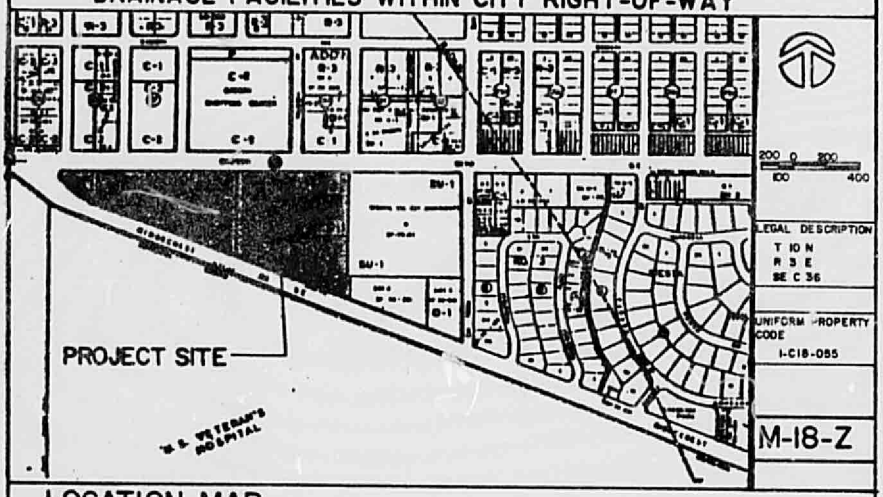
Billy J. Goolsby, P.E.
C.E./Hydrology Section

cc: Rick Duran, Hydrology Inspector

BJG/bsj

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



LOCATION MAP

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. 31 .

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 CONSTRUCTIONS. 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 COMMERCIAL STREET USE.

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

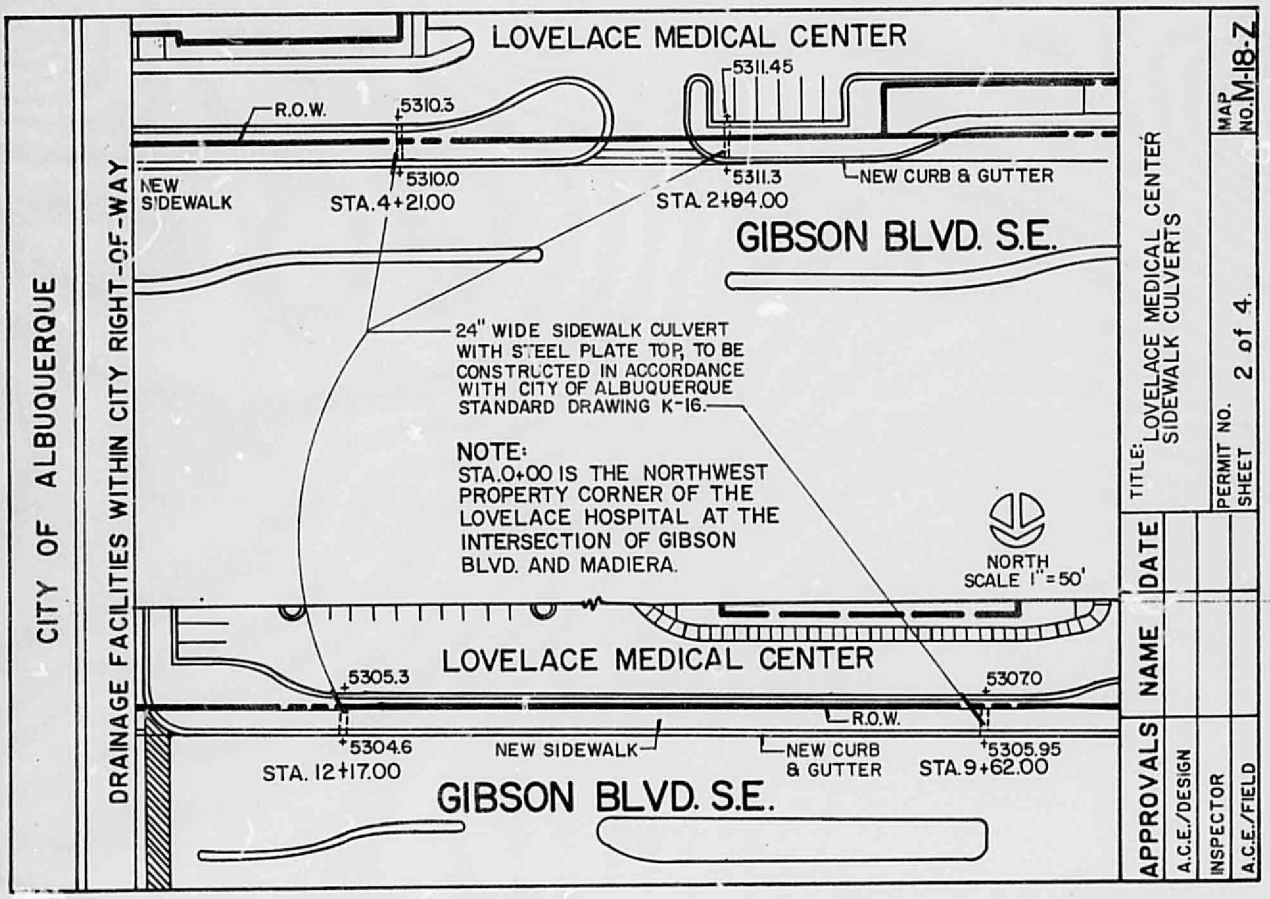
TITLE: LOVELACE MEDICAL CENTER SIDEWALK CULVERTS

PERMIT NO.

SHEET 1 of 4

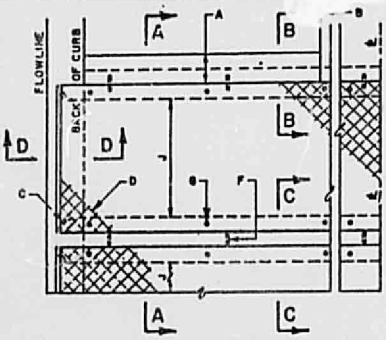
MAP NO. M-18-Z

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

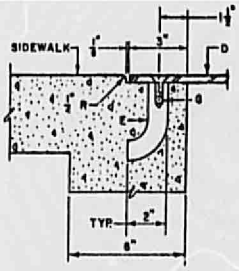

CITY OF ALBUQUERQUE
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY
LOVELACE MEDICAL CENTER
5311.45
R.O.W.
5310.3
5310.0
STA. 4+21.00
5311.3
STA. 2+94.00
NEW CURB & GUTTER
NEW SIDEWALK
GIBSON BLVD. S.E.
24" WIDE SIDEWALK CULVERT WITH STEEL PLATE TOP, TO BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD DRAWING K-16.
NOTE:
STA.0+00 IS THE NORTHWEST PROPERTY CORNER OF THE LOVELACE HOSPITAL AT THE INTERSECTION OF GIBSON BLVD. AND MADIERA.
NORTH
SCALE 1" = 50'
LOVELACE MEDICAL CENTER
5305.3
5307.0
R.O.W.
5304.6
STA. 12+17.00
NEW SIDEWALK
NEW CURB & GUTTER
5305.95
STA. 9+62.00
GIBSON BLVD. S.E.
TITLE: LOVELACE MEDICAL CENTER SIDEWALK CULVERTS
MAP NO. M-18-Z
PERMIT NO.
SHEET 2 of 4.
APPROVALS
NAME
DATE
A.C.E./DESIGN
INSPECTOR
A.C.E./FIELD

CITY OF ALBUQUERQUE

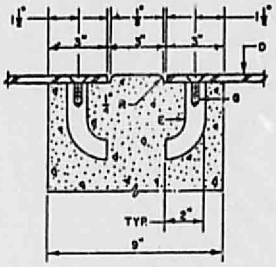
DRAINAGE FACILI W IN CITY RIGHT-OF-WAY



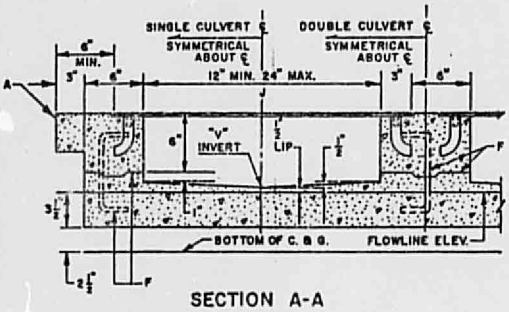
PLAN
SINGLE AND OR MULTIPLE CULVERT



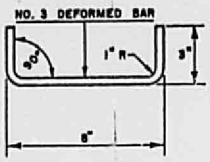
SECTION B-B



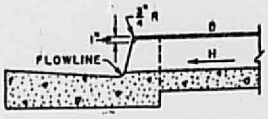
SECTION C-C



SECTION A-A



DOWEL DETAIL



SECTION D-D

APPROVALS	NAME	DATE	TITLE: LOVELACE MEDICAL CENTER SIDEWALK CULVERTS	
A.C.E./DESIGN				
INSPECTOR			PERMIT NO.	MAP NO. M-18-Z
A.C.E./FIELD			SHEET 3 of 4	

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

GENERAL NOTES:

1. PLACING OF DRAIN THRU EXIST. SIDEWALK, C. & G. REQUIRE THAT ENTIRE SIDEWALK, C. & G. STONES BE REMOVED & RE-PLACED AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. THE INVERT SHALL BE TROWELED & RETROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX. DENSITY & SMOOTHNESS. "V" INVERT SHALL BE V-SHAPED TO WITHIN 3' OF OUTLET, WARPED FROM THIS POINT TO OUTLET. AT OUTLET IT SHALL PAR-ALLEL FLOWLINE UNLESS OTHERWISE SHOWN.
4. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE, COLOR, FINISH & SCORING OF ADJACENT CURB & SIDEWALK.
5. SIDEWALK REPLACED DURING CONSTRUCTION TO BE POURED MONOLITHICALLY WITH CULVERT WALLS.
6. DRILL & TAP ROD ANCHORS FOR F.H. MACH. SCREW, SPACE AT 24" O.C. MAX., A MIN. OF 2 P/SIDE P/PLATE. PLACE ONE WITHIN 6" OF EA. END. ANCHORS SHALL BE ATTACHED TO PLATE & PLATE SECURED IN PLACE PRIOR TO POURING OF WALLS.
7. LENGTH OF EA. PLATE SHALL BE SUCH THAT THE WEIGHT WILL NOT EXCEED 300 LBS. & SHALL BE STRESS RELIEVED AFTER FABRICATION. AFTER CLEANING SURFACE OF RUST, SCALE ETC. PLATE & FRAMING MEMBERS WILL BE PAINTED ONE SHOP COAT RED OXIDE & TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
8. THE CITY WILL NOT ASSUME RESPONISIBILITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

CONSTRUCTION NOTES:

A. JOIN TO NEAREST SCORE LINE OR WEAKENED PLANE JOINT, INSTALL $\frac{1}{2}$" EXPANSION JOINT.
B. SIDEWALK OR SETBACK (VARIABLE).
C. 3" RADIUS (TYPICAL).
D. $\frac{3}{8}$" CHECKERED STEEL PLATE.
E. ROD ANCHOR 1" X 6" STAINLESS STEEL.
F. CONSTR. JT. & DOWEL (OPT.), IF DOWELS ARE USED SPACE AT 24" O.C. MAX., $1\frac{1}{2}$" MIN. FROM FACE OF CONC., DOWELS MAY BE INCLINED IF NECESSARY.
G. $\frac{3}{8}$" X 1" F.H. C'SUNK STAINLESS STEEL MACH. SCREW.
H. SLOPE $\frac{1}{4}$" PER FT. MIN.
J. DRAIN WIDTH, 12" MIN. 24" MAX.

APPROVALS	NAME	DATE	TITLE: LOVELACE MEDICAL CENTER SIDEWALK CULVERTS	
A.C.E./DESIGN				
INSPECTOR			PERMIT NO.	MAP NO. M-18-Z
A.C.E./FIELD			SHEET 4 of 4	

DRAINAGE REPORT

FOR

LOVELACE MEDICAL CENTER

RECEIVED
SEP 24 1985
HYDROLOGY SECTION

BY

KEVIN TUCKER AND ASSOCIATES, INC.
312 19th Avenue North, Nashville, Tennessee 37203

PLANNING HISTORY

The subject property is a tract of land situated in the N1/2, NW1/4, Sec.26, T10N, R3E, located on the south side of Gibson Boulevard S.E. between Ridgecrest Drive S.E. and San Pedro S.E., containing approximately 16.65 acres. Currently zoned C-1, C-2 and O-1, the hospital is a non-permissive, permissive, and conditional use respectively. Therefore, it is necessary to rezone the property for the proposed expansion as well as the existing facility. Due to the size and configuration of the property, a Special Use 1 (SU-1) zone has been requested. This zone permits maximum flexibility for the property owner while allowing for public involvement to insure a functional and aesthetic product.

Application for Zone Map Amendment and Site Development Plan approval was submitted on May 31, 1985 for the Environmental Planning Commission Public Hearing on July 18, 1985. Upon review of the staff comments and a meeting on July 10, 1985 with Mr. Jon Messier of the Planning Division, minor corrections to the drawings were necessary. Since the staff report was due immediately, time did not permit the comments to be incorporated into the submittal prior to the public hearing. Therefore, the applicant requested deferral to the August 15, 1985 EPC public hearing. This request was granted by the EPC in their July 18, 1985 public hearing. Therefore, the request for Zone Map Amendment and Site Development Plan approval for Z-85-73-1 will be heard by the Environmental Planning Commission in their August 15, 1985 public hearing.

INSTRUCTIONS

KTA# 85132

PRINT OR TYPE IN BLACK INK ONLY. Use additional sheets if necessary. The complete application is to be submitted to the Planning Division by the applicant or agent. Each application must be accompanied by the filing fee (checks are preferred and made payable to the City of Albuquerque). All attachments must be submitted with the application and, after folding, shall not exceed 8 1/2 x 14 inches. Additional information may be obtained from the Planning Division (505) 766-7422.

RECEIVED
JUN 04 REC'D
KEVIN TUCKER & ASSOCIATES

APPLICATION FOR:

X ZONE MAP AMENDMENT

___ ANNEXATION

DEVELOPMENT PLAN REVIEW

___ SECTOR DEVELOPMENT PLAN

X Site Development Plan

___ Industrial Park Plan

___ Shopping Center Plan

___ Conceptual Review

___ Planning Commission Review

___ Final Plan

1. APPLICANT INFORMATION

a. Applicant: Lovelace Medical Center Telephone: (505)262-7325

Mailing Address: 5400 Gibson Boulevard
Albuquerque, NM Zip Code: 87108

Applicant's Proprietary Interest in the Property: Owner

b. Agent (if any): Kevin Tucker & Associates, Inc. Telephone: (615)320-0091

Mailing Address: 312 19th Avenue North
Nashville, TN Zip Code: 37203

c. Signature of applicant/agent: Mark Fioravanti Date: May 31, 1985

2. LOCATION OF REQUEST

a. Street Address (if any): 5400 Gibson Boulevard

b. Legal Description of the Property:

(1) Lot(s)/Tract(s):

(2) Block:

(3) Subdivision-Addition Name/MRGCD Map: Siesta Hills

c. Location of Property by Streets: The corner of Gibson Boulevard S.E. and Ridgecrest Drive S.E.

d. Uniform Property Code: 1-018-055-166-493-30114

3. PROJECT DETAILS

a. Present Zoning: C-2,C-1,O-1 Proposed: SU-1 for Hospital & Related Facilities

b. Number of Lots Existing: 1 Proposed: 1

c. Number of Dwelling Units Existing: N/A Proposed: N/A

d. Total Land Area Covered by Request: Acres 16.65 Sq. Feet: 725,274

4. JUSTIFICATION(Reason) FOR REQUEST On a separate sheet describe why the current zoning is inappropriate and/or the proposed zoning more desirable for the community.

5. DESCRIPTION OF REQUEST On a separate sheet describe the proposed development.

6. ATTACHMENTS

Zone Map Amendment or Development Plan Review	30 copies
Zone Map Amendment and Annexation	40 copies
Sector Development Plan	

PLANNING DIVISION INTERNAL USE ONLY

Cross-references: No. Signs Issued: 4

Application and Fee Received by: S. Montgomery Date: 5-31-85

Fee Paid: Dollars $ 415.00 Method of Payment: Ck # 4701

Treasurer Validation Credit:

Distribution:

HEARING DATE: July 16, 1985

Secretary-Original/Case File
Applicant Agent
Treasurer

MAP NO. M-18

CASE NUMBER: Z-85-73

NOTICE OF PUBLIC HEARING

ENVIRONMENTAL PLANNING COMMISSION

Notice is hereby given that the Environmental Planning Commission will hold a public hearing on Thursday, July 18, 1985 at 9:00 A.M. in the City Council Chambers, Ground Floor, City Hall, 400 Marquette N.W., to consider the following:

SD-78-3-2
AX-85-19
Z-85-79

Herbert M. Denish and Associates, agents for Seven Bar Land and Cattle Company and V.T. Inc., requests the following:

1) Amendment of the Seven Bar Sector Development Plan's land use plan to permit an auto park in a Planned Commercial Development

2) Annexation and simultaneous establishment of:

a. RT zoning for Parcel K

b. SU-1 for a Planned Residential Development (R-2 uses) for Parcel L

c. SU-1 for a Planned Commercial Development (Automobile sales) for Parcels N-1 and N-2 for an unplatted parcel situated in the W1/2 of Sec. 7, T11N, R3E, and located north of the Calabacillas Arroyo and south of Cibola High School, containing approximately 130 acres. (B-13)

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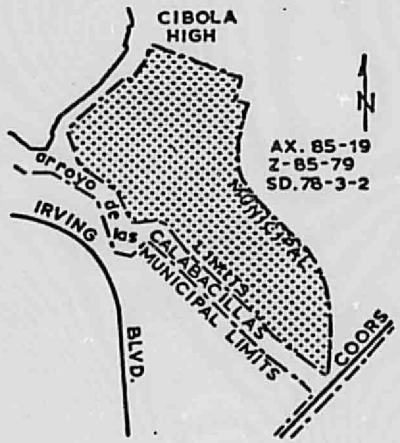
KEVIN TUCKER & ASSOCIATES



Z-74-31-2 Holmes, Sabatini, Smith and Eeds, agent for Brokerage Service Inc., request Site Development Plan approval for Tract 1, Block A, C.C. & F. Properties, zoned SU-1 for an office building and storage, located on the south side of Lomas Boulevard between Tomasita N.E. and Morris N.E., containing approximately 2.90 acres. (K-21)

Z-72-151-1 CMA Architects, agent for All World Travel Inc. requests Site Development Plan approval for O-1 uses for Tract J, La Cuesta Subdivision (SP-83-94) zoned SU-1 for Offices located at the southeast corner of Zia Road and Paisano Street N.E., containing approximately .46 acres. (K-22)

Z-85-23-1 CMA Architects, agent for Casa De Paz, Inc. requests Site Development Plan approval for apartments for Tract I and the west 35 feet of Tract H, La Cuesta Subdivision (SP-83-94) zoned SU-1 for Planned Residential Development located on the south side of Zia Road between Paisano Street N.E. and Zena Lona Street N.E. containing approximately 2.16 acres. (K-22)

Z-85-69 Scanlon and Associates, Inc., agents for Bellamah Community Development requests a change of zone from R-1 to R-T for Lot 5, Block 11; Lot 1, Block 12, Town of Atrisco Grant; and Lots 1-10, Block 1; Lots 1-10, Block 5, Sunrise Terrace Unit One, located between Eucariz Avenue and Tower Road SW, containing approximately 11.28 acres. (L-8)

Z-82-23-1 de la Torre-Rainhart, agents for Westside Group, requests a change of zone from SU-1 for Planned Residential Development (450 dwellings) SU-1 for Mobile Home Park and Site Development Plan approval for Block 10, Town of Atrisco Grant, located west of 98th Street between Sunset Gardens Road S.W. and Eucariz Avenue S.W., containing approximately 22.07 acres. (L-9)

Z-85-68
AX-85-16 City of Albuquerque, Rehab Section, agents for Ms. Tillie P. Chavez requests annexation and simultaneous establishment of R-1 zoning for Lot 11, Nursery Addition, located on the south side of Young Avenue SW between Ethel Avenue and Atrisco Drain S.W., containing approximately 6,000 square feet. (L-13)

Z-85-73-1 Kevin Tucker and Associates, Inc. agents for Lovelace Medical Center requests a change of zone from C-2, C-1 and O-1 to SU-1 for Hospital and Related Facilities and Site Development Plan approval for a tract of land situated in the N1/2, NW1/4, Sec. 36, T10N, R3E, located on the south side of Gibson Boulevard S.E. between Ridgecrest Drive S.E. and San Pedro S.E., containing approximately 16.65 acres. (M-18)

LOVELACE MEDICAL CENTER

July 11, 1985

James Sutton, Chairman
Environmental Planning Commission
Planning Division
Municipal Development Dept.
P.O. Box 1293
Albuquerque,
New Mexico 87103

Re: Z-85-73-1
Albuquerque,
New Mexico

Dear Mr. Sutton:

In a meeting on July 10, 1985 with Mr. Jon Messier of the Planning Division, we reviewed the staff comments regarding our upcoming request for change of zone and development plan approval for the proposed work at the Lovelace Medical Center.

Upon review of the comments from Planning, the only outstanding recommendations were from transportation, the remarks of which we can incorporate, since we have been in constant contact with the department.

However, since the staff report was due immediately, we do not have time to resubmit the drawings with the minor corrections. It has been our intent to work closely with all agencies and appear before the Commission with as complete, thorough and knowledgeable package as possible.

We therefore, respectfully request a deferral of our hearing from July 18, 1985 to August 15, 1985 in order to respond to any remaining comments so, it is hoped, we may receive approval by providing the Commission with all possible information and assistance.

5400 Gibson Blvd., S.E., Albuquerque, New Mexico 87108, 505/262-7000

We appreciate the cooperation, the time and the assistance all of the reviewing agencies have given us over the past many months, and look forward to the Lovelace Medical Center project moving ahead expeditiously.

Respectfully,

AGENTS FOR LOVELACE MEDICAL CENTER:

GOULD TURNER GROUP, P.C., ARCHITECTS

J. Michael Gould

J. Michael Gould

GREGORY T. HICKS & ASSOCIATES, P.C.

Gregory Hicks

Gregory Hicks

KEVIN TUCKER & ASSOCIATES, INC.

J. Michael Gould

By: J. Michael Gould

aus

cc: David Kincaid
Terry Dotson
Frank Young
Mark Fioravanti

OFFICIAL NOTIFICATION OF DECISION

City of Albuquerque
Municipal Development Department
Planning Division
P.O. Box 1293, Albuquerque, New Mexico 87103

Kevin Tucker and Associates, Inc.
312 19th Avenue North
Nashville, Tennessee, 37203

RECEIVED
JUL 29 REC'D
KEVIN TUCKER & ASSOCIATES

Date: July 19, 1985

NOTIFICATION OF DECISION

File: Z-85-73-1
Location: Tract of land situated in the N1/2, NW1/4, Sec. 36, T10N, R3E, located on the south side of Gibson Boulevard S.E. between Ridgecrest Drive S.E. and San Pedro S.E., containing approximately 16.65 acres. (M-18)

On July 18, 1985, the Environmental Planning Commission voted to defer your request for a change of zone from C-2, C-1 and O-1 to SU-1 for Hospital and Related Facilities and Site Development Plan approval for the above referenced property to the August 15, 1985 public hearing.

THEREFORE, BE IT RESOLVED THAT Z-85-73-1 be deferred to August 15, 1985 public hearing at the request of the applicant.

IF YOU WISH TO APPEAL THIS DECISION, YOU MUST DO SO BY 8/2/85 IN THE MANNER DESCRIBED BELOW. A NON-REFUNDABLE FILING FEE OF $40 IS REQUIRED AT THE TIME THE APPEAL IS FILED.

Appeal to the City Council: Any person aggrieved with any determination of the Environmental Planning Commission acting under this ordinance may file an appeal to the City Council by submitting written application on the Planning Division form to the Planning Division within 15 days of the Planning Commission's decision. The date the determination in question is issued is not included in the 15-day period for filing an appeal, and if the fifteenth day falls on a Saturday, Sunday or holiday as listed in the Merit System Ordinance, the next working day is considered as the deadline for filing the appeal. The City Council may decline to hear the appeal if it finds that all City plans, policies and ordinances have been properly followed. If it decides that all City plans, policies and ordinances have not been properly followed, it shall hear the appeal. Such appeal, if heard, shall be heard within 60 days of its filing.

YOU WILL RECEIVE NOTIFICATION IF ANY OTHER PERSON FILES AN APPEAL. IF THERE IS NO APPEAL YOU CAN RECEIVED BUILDING PERMITS AT ANY TIME AFTER THE APPEAL DEADLINE QUOTED ABOVE, PROVIDED ALL CONDITIONS IMPOSED AT THE TIME OF APPROVAL HAVE BEEN MET. SUCCESSFUL APPLICANTS ARE REMINDED THAT OTHER REGULATIONS OF THE CITY MUST BE COMPLIED WITH, EVEN AFTER APPROVAL OF THE REFERENCED APPLICATION(S).

Sincerely,

Phil Garcia
Assistant City Planner

PG/dlw

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

HYDROLOGY SECTION PROJ. NO. M-18 DATE: 7/24/84

PLANNING DIVISION NO. _____

CONFERENCE RECAP

SUBJECT: Lovelace Medical Center

ATTENDANCE: WHO	REPRESENTING
Steve Hulsey	
Mark Fioravanti	
Billy Goolsby	City Hydrology

FINDINGS: ① Approved Drainage Report per DPM required prior to release of building permit

② Site is not located in a flood hazard area but does contribute to one - Existing impervious area will not be significantly change & existing runoff will remain approximately the same. However improvements to reduce runoff are recommended if feasible.

③ Future stormsewer system may be available

* Please provide a copy of recap w/submittal

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: Billy A. Goolsby SIGNED: [illegible]

TITLE: CE Hydrology TITLE: [illegible]

DATE: 7/24/84 DATE: _____

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Lovelace Medical Center *ZONE ATLAS/DRNG. FILE #:* _____

LEGAL DESCRIPTION: See attachment

CITY ADDRESS: 5400 Gibson Boulevard, Albuquerque, N.M. 87108

ENGINEERING FIRM: Kevin Tucker & Associates, Inc. *CONTACT:* Mr. Don Powell

ADDRESS: 312 19th Ave.No. Nashville, TN 37203 *PHONE:* 615-320-0091

OWNER: Lovelace Medical Center *CONTACT:* Mr. Frank Young

ADDRESS 5400 Gibson Blvd., Albuquerque, N.M. *PHONE:* 505-262-7325

ARCHITECT: Gould Turner Group, P.C. *CONTACT:* Mr. Mike Gould

ADDRESS: P.O. Box 121056, Nashville, TN 37212 *PHONE:* 615-383-2360

SURVEYOR: Tom Mann Associates, Inc. *CONTACT:* Mr. Tom Mann

ADDRESS: 811 Dallas, N.E., Albuquerque, NM 87110 *PHONE:* 505-265-5611

CONTRACTOR: Rodgers Construction, Inc. *CONTACT:* Mr. Steve Meek

ADDRESS: International Plaza P.O. Box 17387, Nashville, TN 37217 *PHONE:* 615-361-4400

PRE-DESIGN MEETING:

X *YES* — *DRB NO.* _____

_____ *NO* — *EPC NO.* Z-85-73-1

X *COPY OF CONFERENCE RECAP SHEET PROVIDED* — *PROJECT NO.* _____

TYPE OF SUBMITTAL:

X *DRAINAGE REPORT*

X *DRAINAGE PLAN*

_____ *CONCEPTUAL GRADING & DRAIN. PLAN*

_____ *GRADING PLAN*

_____ *EROSION CONTROL PLAN*

_____ *ENGINEER'S CERTIFICATION*

CHECK TYPE OF APPROVAL SOUGHT:

_____ *SKETCH PLAT APPROVAL*

_____ *PRELIMINARY PLAT APPROVAL*

X *SITE DEVELOPMENT PLAN APPROVAL*

_____ *FINAL PLAT APPROVAL*

_____ *BUILDING PERMIT APPROVAL*

_____ *FOUNDATION PERMIT APPROVAL*

_____ *CERTIFICATE OF OCCUPANCY APPROVAL*

_____ *ROUGH GRADING PERMIT APPROVAL*

_____ *GRADING/PAVING PERMIT APPROVAL*

OTHER Zone Map Amendment *(SPECIFY)*

DATE SUBMITTED: 8/1/85

BY: Don Powell

Rev. 11/84

Flood Hazard Boundary

The subject site, located at the Southeast corner of the intersection of Gibson Boulevard S.E. and Ridgecrest Drive does not lie within a flood area as designated on the flood hazard boundary maps. A copy of the flood hazard boundary index map has been included with the subject site outlined.

Off-Site Conditions

A city of Albuquerque Ortho-Topo map is not available for the subject site; therefore, USGS Quad Map 4654 11 S.E. was used in determining the off-site drainage areas. Rates of run-off for offsite and on-site, existing and proposed conditions were determined using the procedure outlined in Section 22 of the City of Albuquerque development Process Manual.

The majority of offsite flow originates from Ridgecrest Drive and property located to the south of Ridgecrest. This runoff flows in a westerly direction along Ridgecrest with a major portion of the flow bypassing the site and the remainder flowing onto the site through ramps along Ridgecrest.

Under existing conditions, most of this flow is bypassing the site. However, interviews with hospital personnel indicate that heavy rainfalls do result in stormwater flowing down the service drive entrance located at approximately the mid-point of the south property line.

The proposed construction will not significantly affect the offsite flow patterns. However, to address the problem of stormwater flowing down the service drive, a combination speed bump, diversion berm has been proposed at the east end of the Ridgecrest Drive parking area. This will serve to divert a portion of the offsite runoff through the property along the east drive to Gibson Boulevard S.E.

The drainage plan and USGS map indicate the delineation of the contributing offsite drainage area. A summary of the runoff calculations follows this narrative.

On-Site Conditions

The existing site drains from south to north with most of the runoff handled by surface sheet flow. A small amount of flow is picked up by two existing inlets and discharged back onto the surface as quickly as possible. Roof leaders are discharged directly onto the surface at numerous locations around the buildings. There are no ponding facilities on the site. Site runoff is discharged directly onto Gibson Boulevard through the existing sidewalk culverts and entrance ramps.

With the proposed conditions, the south to north surface runoff pattern will be maintained. Existing inlets will be maintained or relocated as necessary to provide the best possible flow patterns while minimizing concentrated flows. Roof leaders will again be discharged at several locations around the site to keep any concentrated flows to a minimal level. Site runoff will be discharged onto Gibson Boulevard through new sidewalk culverts installed at various low points. In addition, curb openings will be provided at the north end of the large east parking area. Surface runoff flowing over the pervious area provided along Gibson Boulevard will have some opportunity for infiltration prior to discharging onto Gibson Boulevard.

Flow calculations for the drainage areas outlined on the drainage plan follow this narrative.

Erosion Control

Silt barriers, silt fences and sediment traps will be used during construction on an 'as-needed' basis. The majority of the existing pavement will remain undisturbed and will, therefore, not require erosion control measures. Exposure of graded areas will be kept to a minimum. Final erosion control measures will be accomplished with seeding and other vegetation as per landscape plans.

Drainage Calculation Summary

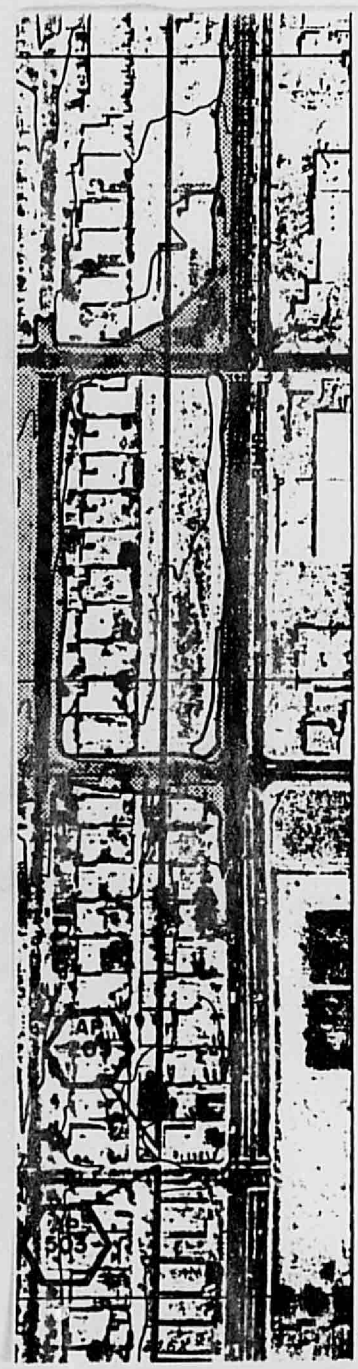
Existing Conditions

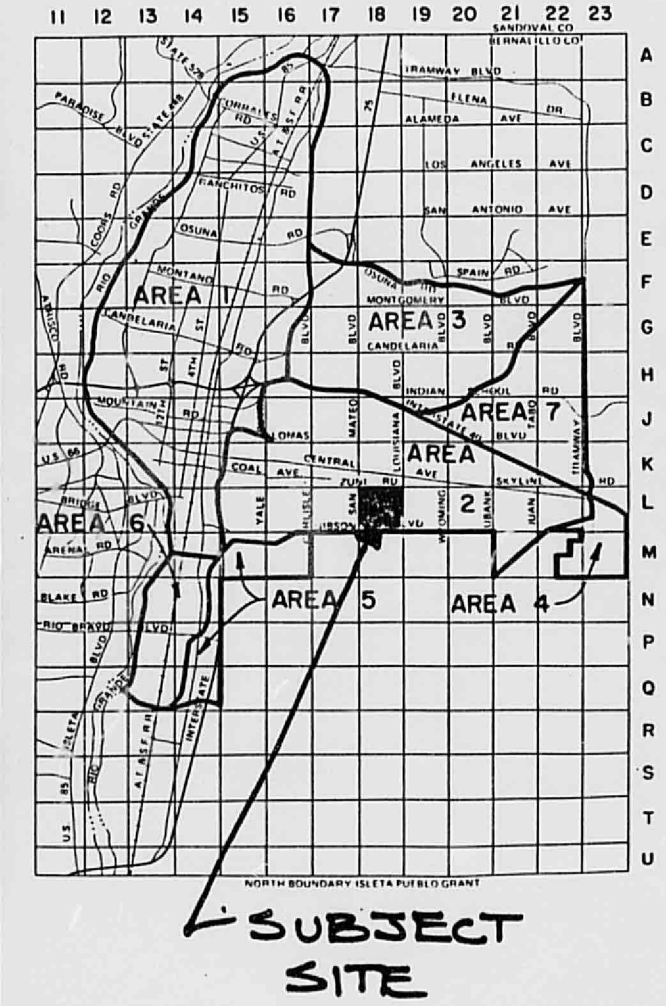
Total Area of Site	=	16.65 acres
Impervious Area	=	14.78 acres
10 yr Runoff Discharge	=	49.10 cfs
100 yr Runoff Discharge	=	74.79 cfs

Proposed Conditions

Total Area of Site	=	16.25 acres
Impervious Area	=	14.28 acres
10 yr Runoff Discharge	=	48.01 cfs
100 yr Runoff Discharge	=	73.09 cfs

Conditions staying roughly the same.





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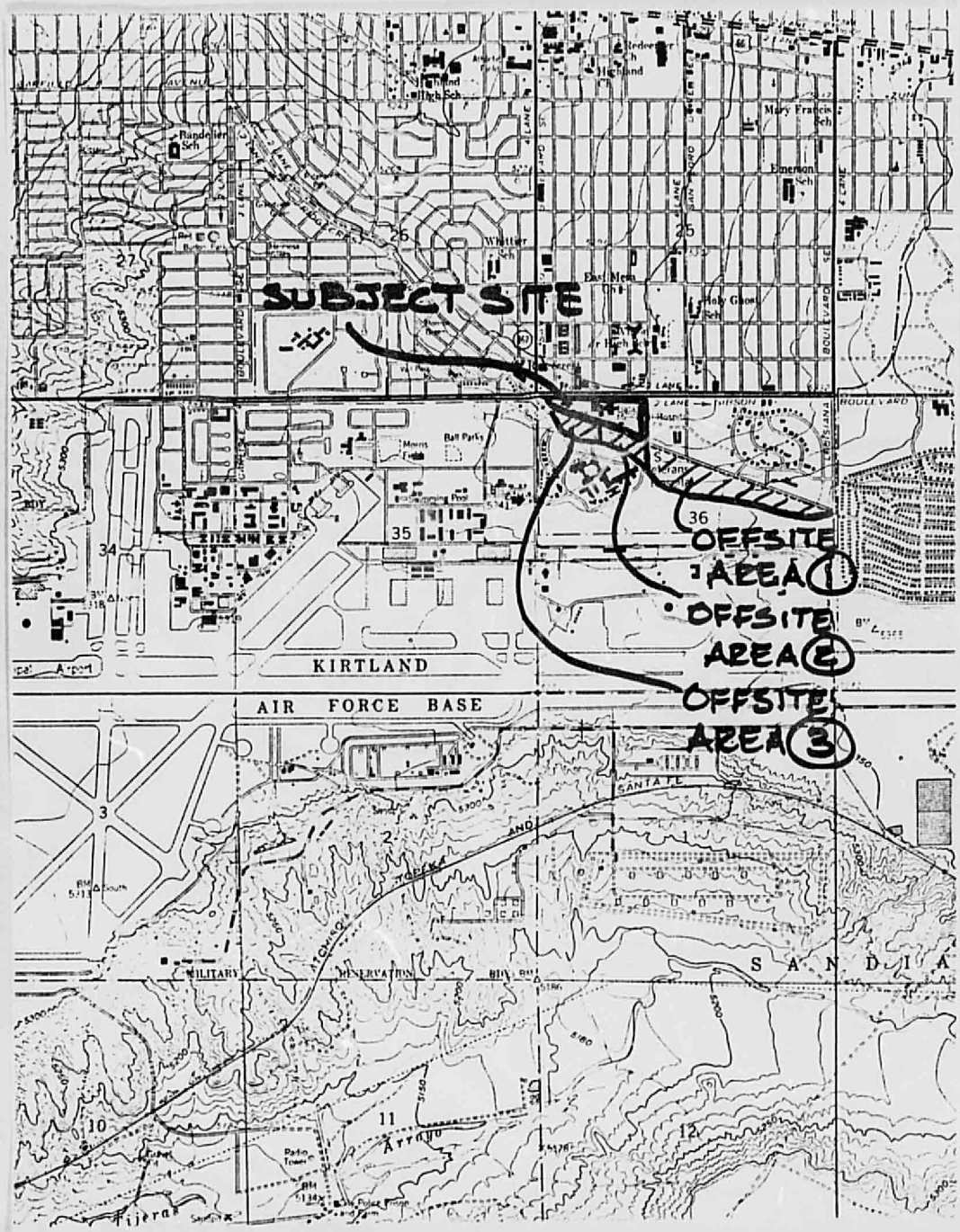


THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT

CALCULATION SYNOPSIS AND SPECIAL CONDITIONS

RATIONAL METHOD WAS USED FOR CALCULATION OF DISCHARGES. SCS SOILS GROUP C WAS USED IN CONJUNCTION WITH PLATE 22.2 C-1 TO ESTABLISH A 'C' FACTOR FOR RUNOFF. PLATE 22.2 D-1 WAS USED TO ESTABLISH A 2.35" RUNOFF VOLUME FOR 100 YR 6-HOUR RAINFALL VOLUMES. PLATE 22.2 D-2 WAS USED TO ESTABLISH MULTIPLICATION FACTORS FOR INTENSITY.

THE PROPOSED RETENTION BASIN, FOR THE V.A. HOSPITAL, WAS TAKEN INTO ACCOUNT WHEN ESTABLISHING THE OFFSITE RUNOFF. OF THE RUNOFF ON RIDGECREST DRIVE, 10% OF THE FLOW WAS ASSUMED TO TURN DOWN THE REAR SERVICE DRIVE.

CALCULATIONS

6 HR RAINFALL VOL. - 100 YR = 2.35
10 YR. FACTOR = 0.657

EXISTING CONDITIONS

OFFSITE 1

DA = 35.81 ac.
T_c = (4200')/(1.5 fps) (60) = 46 min
I_{10} = (0.657)(2.35)(0.98) = 1.51 "/hr
I_{100} = 2.35 (0.98) = 2.30 "/hr
C = 0.65
Q_{10} = (0.65)(1.51)(35.81) = 35 cfs (10% FLOWS THROUGH
Q_{100} = (0.65)(2.30)(35.81) = 53 cfs SITE)

OFFSITE 2

D.A. = 4.59 ac
T_c = (900')/(1.5)(60) = 10 min
I_{10} = (0.657)(2.35)(2.15) = 3.32 in/hr
I_{100} = (2.35)(2.15) = 5.05 in/hr
C = 0.70
Q_{10} = (0.70)(3.32)(4.59) = 10.67 cfs
Q_{100} = (0.70) (5.05)(4.59) = 16.23 cfs

AREA 1

D.A. = 7.62 ac 6.69 ac IMPERVIOUS
T_c = 10 min or less
I_{10} = 3.32 I_{100} = 5.05
C = 0.87
Q_{10} = (0.87)(3.32)(7.62) = 22 cfs
Q_{100} = (0.87)(5.05)(7.62) = 33.5 cfs

EXISTING (CONTINUED)

AREA (2)

D.A. = 0.51 ac. 0.44 ac impervious

T_c = 10 min

I_{10} = 3.32 I_{100} = 5.05

C = 0.87

Q_{10} = (0.87)(3.32)(0.51) = 1.47 cfs

Q_{100} = (0.87)(5.05)(0.51) = 2.24 cfs

AREA (3)

D.A. = 0.71 ac 0.65 ac impervious

T_c = 10 min

I_{10} = 3.32 I_{100} = 5.05

C = 0.89

Q_{10} = (0.89)(3.32)(0.71) = 2.10

Q_{100} = (0.89)(5.05)(0.71) = 3.19

AREA (4)

D.A. = 0.16 ac 0.16 ac impervious

T_c = 10 min

I_{10} = 3.32 I_{100} = 5.05

C = 1.0

Q_{10} = (1)(3.32)(0.16) = 0.53

Q_{100} = (1)(5.05)(0.16) = 0.81

AREA (5)

D.A. = 0.75 0.57 ac impervious

T_c = 10 min

I_{10} = 3.32 I_{100} = 5.05

C = 0.75

Q_{10} = (0.75)(3.32)(0.75) = 1.87

Q_{100} = (0.75)(5.05)(0.75) = 2.84

EXISTING (CONTINUED)

AREA 6

D.A. = 2.11 acres 1.9 ac IMPERVIOUS

T_c = 10 min

I_{10} = 3.32 I_{100} = 5.05

C = 0.92

Q_{10} = 0.92 (3.32)(2.11) = 6.4

Q_{100} = 0.92 (5.05)(2.11) = 9.8

AREA 7

D.A. = 0.80 Ac. 0.63 ac impervious

T_c = 10

I_{10} = 3.32 I_{100} = 5.05

C = 0.81

Q_{10} = 0.81 (3.32)(0.80) = 2.15

Q_{100} = 0.81 (5.05)(0.80) = 3.27

AREA 8

D.A. = 1.34 ac 1.15 ac impervious

T_c = 10

I_{10} = 3.32 I_{100} = 5.05

C = 0.86

Q_{10} = (0.86)(3.32)(1.34) = 3.8

Q_{100} = (0.86)(5.05)(1.34) = 5.8

EXISTING ROOF AREAS

T_c = 10 min or less

C = 1.0

I_{10} = 3.32 I_{100} = 5.05

AREA R1

D.A. = 0.10 ac

Q_{10} = (1.0)(3.32)(0.10) = 0.33

Q_{100} = (1.0)(5.05)(0.1) = 0.51

EXIST. ROOF (CONTINUED)

AREA R2

D.A. = 0.36 ac.

$Q_{10} = (1)(3.32)(0.36) = 1.20$

$Q_{100} = (1)(5.05)(0.36) = 1.82$

AREA R3

D.A. = 0.15 ac

$Q_{10} = (1)(3.32)(0.15) = 0.50$

$Q_{100} = (1)(5.05)(0.15) = 0.76$

AREA R4

D.A. = 0.14 ac

$Q_{10} = (1)(3.32)(0.14) = 0.47$

$Q_{100} = (1)(5.05)(0.14) = 0.71$

AREA R5

D.A. = 0.24 ac

$Q_{10} = (1)(3.32)(0.24) = 0.80$

$Q_{100} = (1)(5.05)(0.24) = 1.21$

AREA R6

D.A. = 0.06 ac

$Q_{10} = (1)(3.32)(0.06) = 0.20$

$Q_{100} = (1)(5.05)(0.06) = 0.30$

AREA R7

D.A. = 0.41 ac

$Q_{10} = 1(3.32)(0.41) = 1.36$

$Q_{100} = 1(5.05)(0.41) = 2.07$

AREA R8

D.A. = 0.21 ac

$Q_{10} = 1.0(3.32)(0.21) = 0.70$

$Q_{100} = 1.0(5.05)(0.21) = 1.06$

AREA B9

D.A. = 0.40 ac

Q_{10} = 1.0(3.32)(0.40) = 1.33

Q_{100} = 1.0(5.05)(0.40) = 2.02

AREA B10

D.A. = 0.18 ac

Q_{10} = 1(3.32)(0.18) = 0.60

Q_{100} = 1(5.05)(0.18) = 0.91

AREA B11

D.A. = 0.39 ac

Q_{10} = 1(3.32)(0.39) = 1.29

Q_{100} = 1(5.05)(0.39) = 1.97

PROPOSED CONDITIONS

OFFSITE AREA 1

D.A. = 31.22 ac

T_c = 3500/1.5 (60 = 40 min

I_{10} = (0.657)(2.35)(1.05) = 1.62 in/hr

I_{100} = (2.35)(1.05) = 2.47

C = 0.65

Q_{10} = 0.65(1.62)(31.22) = 32.9

Q_{100} = 0.65(2.47)(31.22) = 50.1

OFFSITE AREA 2

D.A. = 4.59 ac

T_c = 10 min

I_{10} = 3.32 I_{100} = 5.05

C = 0.70

Q_{10} = 0.70(3.32)(4.59) = 10.67

Q_{100} = 0.70(5.05)(4.59) = 16.23

ONSITE

T_c = 10 min or less

I_{10} = 3.32 I_{100} = 5.05

AREA 1

D.A. = 1.59 ac 1.43 ac impervious

C = 0.90

Q_{10} = 0.90(3.32)(1.59) = 4.75

Q_{100} = 0.90(5.05)(1.59) = 7.23

AREA 2

D.A. = 3.6 ac 3.01 ac impervious

C = 0.84

Q_{10} = 0.84(3.32)(3.6) = 10.0

Q_{100} = 0.84(5.05)(3.6) = 15.3

PROPOSED (CONTINUED)

AREA 3

D.A. = 0.56 ac 0.46 ac impervious

C = 0.83

Q_{10} = 0.83 (2.32)(0.56) = 1.54

Q_{100} = 0.83 (5.05)(0.56) = 2.35

AREA 4

D.A. = 4.28 3.36 ac impervious

C = 0.80

Q_{10} = 0.80 (3.32)(4.28) = 11.4

Q_{100} = 0.80 (5.05)(4.28) = 17.3

AREA 5

D.A. = 0.13 ac 0.13 ac impervious

C = 1.0

Q_{10} = 1 (3.32)(0.13) = 0.43

Q_{100} = 1 (5.05)(0.13) = 0.66

AREA 6

D.A. = 0.12 ac 0 ac impervious

C = 0.5

Q_{10} = 0.5 (3.32)(0.12) = 0.20

Q_{100} = 0.5 (5.05)(0.12) = 0.30

AREA 7

D.A. = 0.45 0.26 ac impervious

C =

Q_{10} = 0.70 (3.32)(0.45) = 1.04

Q_{100} = 0.70 (5.05)(0.45) = 1.57

AREA 8

D.A. = 0.29 ac 0.24 ac impervious

C = 0.84

Q_{10} = 0.84 (3.32)(0.29) = 0.81

Q_{100} = 0.84 (5.05)(0.29) = 1.23

AREA (9)

D.A. = 1.60 ac 1.44 ac impervious

C = 0.89

Q_{10} = 0.89(3.32)(1.60) = 4.73 Q_{100} = 0.89(5.05)(1.6) = 7.17

AREA (10)

D.A. = 0.56 ac 0.51 ac impervious

C = 0.92

Q_{10} = 0.92(3.32)(0.56) = 1.71 Q_{100} = 0.92(5.05)(0.56) = 2.60

AREA (B1)

D.A. = 0.48

C = 1.0

Q_{10} = 3.32(0.48) = 1.59

Q_{100} = 5.05(0.48) = 2.42

AREA (B2)

D.A. = .06

C = 1

Q_{10} = 3.32(0.06) = 0.20

Q_{100} = 5.05(0.06) = 0.30

AREA (R9)

D.A. = .06

C = 1

Q_{10} = 3.32(.06) = 0.20

Q_{100} = 5.05(.06) = 0.30

AREA (B5)

D.A. = 0.54

C = 1

Q_{10} = 3.32(0.54) = 1.79

Q_{100} = 5.05(0.54) = 2.73

AREA (R6)

D.A. = 0.32

Q_{10} = 3.32(0.32) = 1.06

Q_{100} = 5.05(0.32) = 1.62

PROPOSED BOOF AREAS (CONTINUED)

AREA B7

D.A. = 0.40

Q_{10} = 3.32 (0.40) = 1.33

Q_{100} = 5.05 (0.40) = 2.02

AREA B8

D.A. = 0.27

Q_{10} = 3.32 (0.27) = 0.90 cfs

Q_{100} = 5.05 (0.27) = 1.36 cfs

AREA B9

D.A. = 0.61

Q_{10} = 3.32 (0.61) = 2.02 cfs

Q_{100} = 5.05 (0.61) = 3.08 cfs

AREA B10

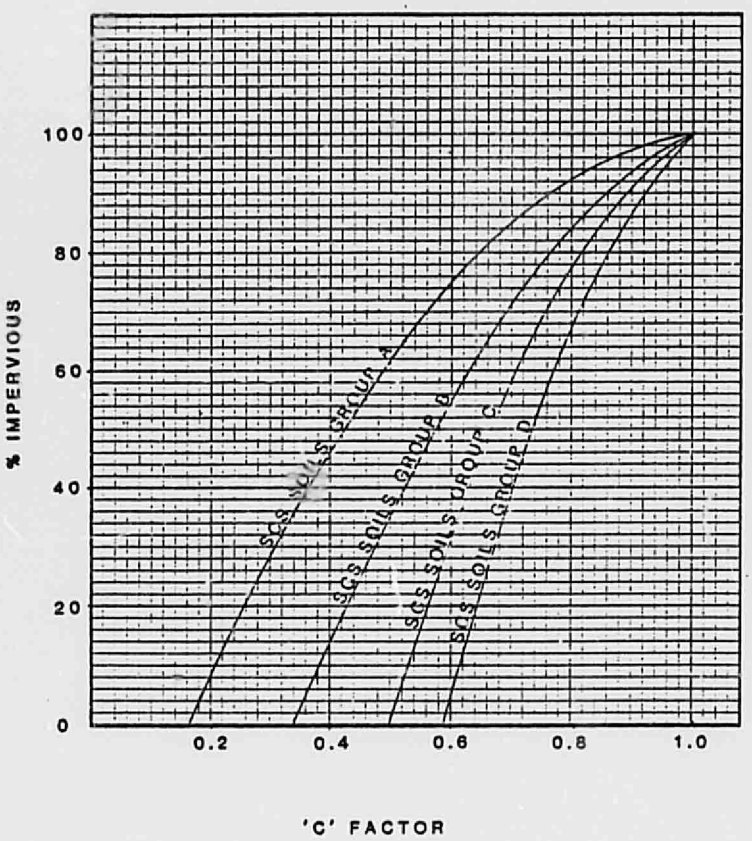
D.A = 0.65

Q_{10} = 3.32 (0.65) = 2.16 cfs

Q_{100} = 5.05 (0.65) = 3.28 cfs

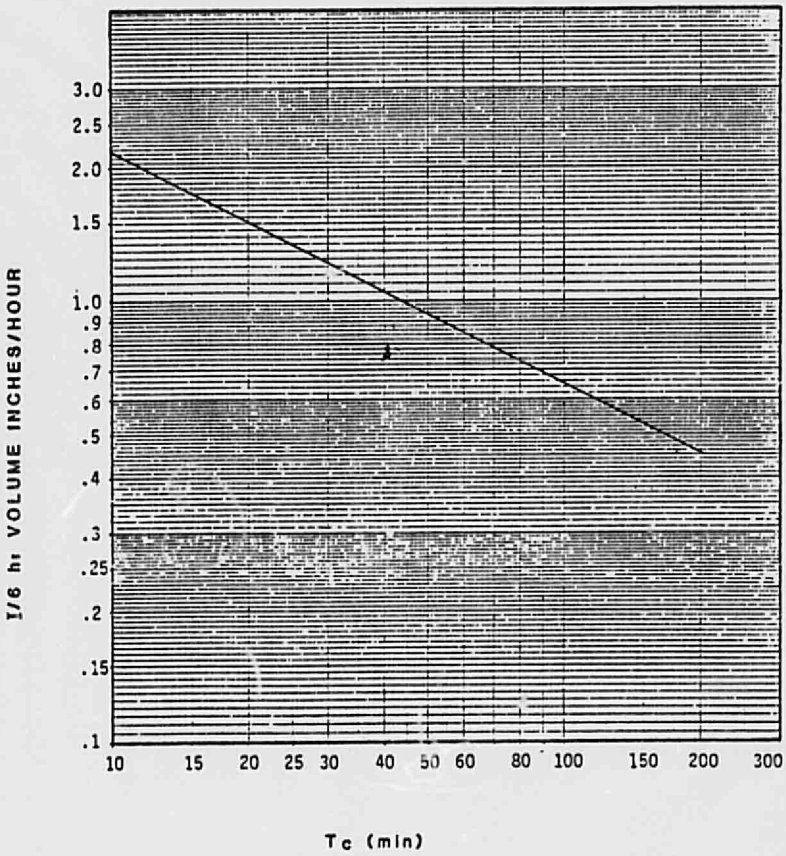
DRAINAGE CRITERIA

DETERMINATION OF RATIONAL FORMULA 'C' FACTOR



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.

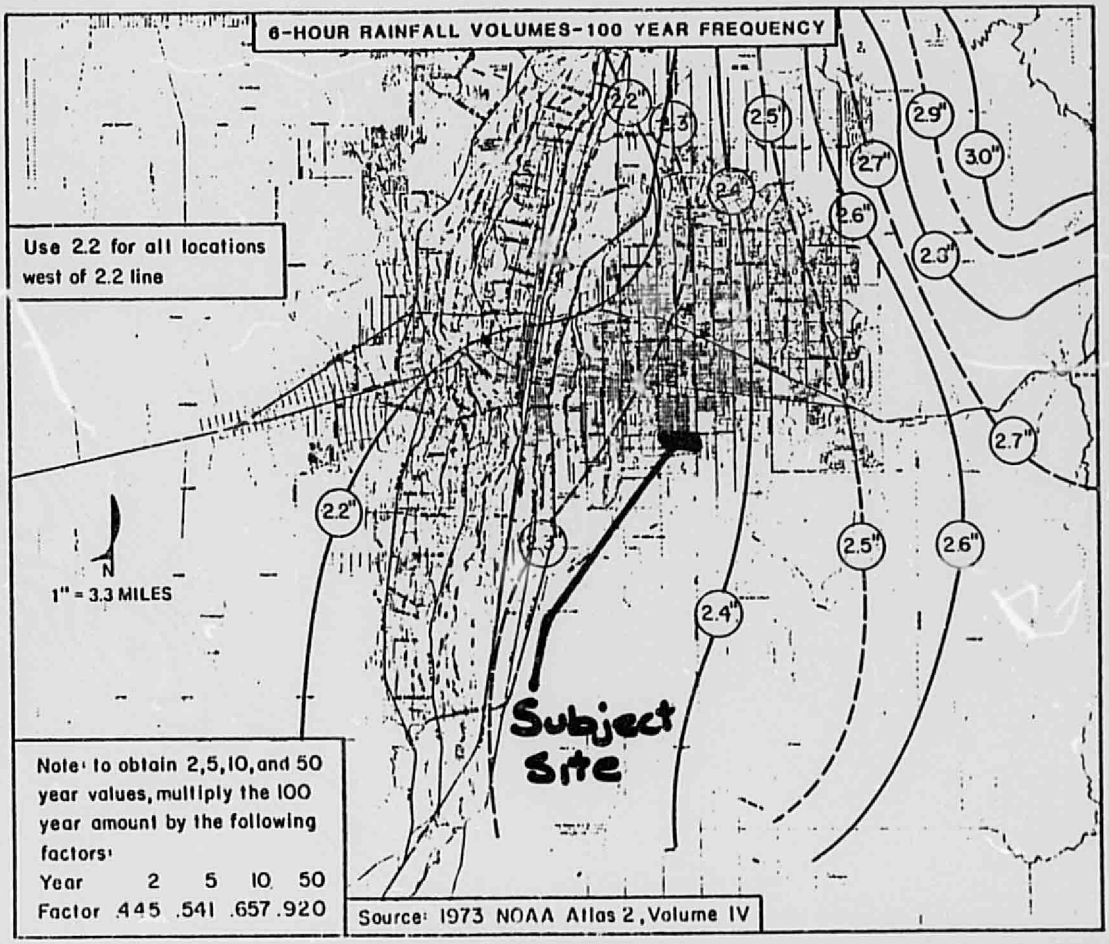


PLATE 22.2 D-1

22.2

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