PLANS/PLATS ON FILE

FILE DESC: B-13/D001

PLANS/PLATS 13

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

March 22, 1985

Jim Blackwell
Blackwell Engineering
1620 Central Avenue, SE
Albuquerque, New Mexico 87106

RE: DRAINAGE & GRADING REPORT FOR IRVING BUSINESS PARK
(B-13/D1) RECEIVED FEBRUARY 6, 1985

Dear Mr. Blackwell:

I have reviewed the referenced report and forward these comments:

1. Requrie more grading contours and spot elevations.
2. Indicate drainage basins and quantify the runoff.
3. Indicate how off-site flows are to enter the site. Quantify the off-site flows.
4. Give more details on all the hydraulic structures.
5. No developed parking or structure will be allowed beyond the Simons and Li boundary. An alternate solution would be to stabilize the Calabacillas Arroyo.
6. Letter of concurrence will be required for any grading outside the property.
7. The above comments are not a complete review, but will be necessary for future reviews.

If you have any questions or comments regarding this project, please call me at 766-7644.

Cordially,

Carlos A Montoya

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

B13/D1

Bellamah Community Development

RECEIVED
MAY 16 1985
DH0120
HYDROLOGY SECTION

May 14, 1985

Mr. Fred Aguirre
Engineering Division
City of Albuquerque
P. O. Box 1293
Albuquerque, New Mexico 87103

Subject: Irving Business Park/
Tract "BB" Eagle Ranch

Dear Fred,

Bellamah Community Development has no objection to the grading proposed upon Tract "BB", Eagle Ranch, as shown on the Irving Business Park grading plan (undated).

Bellamah Community Development will assume no responsibility for any erosion control as a result of such grading.

Very truly yours,

D. T. Robertson
Senior Vice President
and Regional Manager

DTR:gcp

cc: Jaynes Corporation,
General Contractor

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

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

May 24, 1985

Mr. Kent Freier
Denny-Gross & Associates, Inc.
2400 Comanche Road N.E.
Albuquerque, N.M. 87107

REF: IRVING BUSINESS PARK DRAINAGE PARK (B13-D1) RECEIVED APRIL 19, 1985

Dear Mr. Freier:

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

1. All that was requested by this submittal was for rough grading only. I signed-off Wednesday, April 22, 1985 for that. Please be advised that a detailed Drainage Plan and report will be required to be submitted for review and approval with any other process request.

2. With regard to the report I have a couple of comments.
   a. Pages A-6 & A-7 of the report are not legible. What are they for?
   b. Off-site flows have not been quantified nor have they been identified as to how they will be accepted and routed through the site.

Should you have any questions or comments, please call me at 766-7644.

Cordially,

Billy J. Goolsby

Billy J. Goolsby
CE/Hydrology

BJG/cl

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Irving Business Park ZONE ATLAS/DRNG. FILE #: B-13

LEGAL DESCRIPTION: NW 1/4, Section 7, T 11 N, R 2 E,

CITY ADDRESS: Irving Boulevard N.W.

ENGINEERING FIRM: Denney-Gross & Associates, Inc. CONTACT: Kent Freier

ADDRESS: 2400 Comanche Road N.E. PHONE: 884-0696

OWNER: Southwest Investment Realty CONTACT: Mike Castillo

ADDRESS: 2727 San Pedro Drive N.E. PHONE: 883-3070

ARCHITECT: Claudio Vigil Architects & Planners CONTACT: Warren Shaw

ADDRESS: 2340 Alamo Avenue S.E. PHONE: 247-1000

SURVEYOR: Denney-Gross & Associates, Inc. CONTACT: Steve Youtsey

ADDRESS: 2400 Comanche Road N.E. PHONE: 884-0696

CONTRACTOR: Jaynes Corporation CONTACT: Don Power

ADDRESS: 2906 Broadway NE PHONE: 345-8591

PRE-DESIGN MEETING:

____ YES
_X_ NO
____ COPY OF CONFERENCE RECAP SHEET PROVIDED

RECEIVED
JUN 18 1985
HYDROLOGY SECTION

DRB No. -----
EPC No. -----
PROJ. No. Non-Work Order

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
____ DRAINAGE PLAN
____ CONCEPTUAL GRADING & DRAINAGE PLAN
_X_ GRADING PLAN
_X_ EROSION CONTROL PLAN
____ ENGINEER'S CERTIFICATION

NOTE: Claudio Vigil is Architect for Phase I.
Gordon Hall is Architect for Phase II.
No Architect for Phase III.

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
_X_ ROUGH GRADING PERMIT APPROVAL
____ GRADING/PAVING PERMIT APPROVAL
____ OTHER _____ (SPECIFY)

DATE SUBMITTED: June 17, 1985

BY: Kent Freier
KENT FREIER

DRAINAGE INFORMATION SHEET

PROJECT TITLE: IRVING BUSINESS DEVELOPMENT ZONE ATLAS/DRNG. FILE #: B-13 D-1

LEGAL DESCRIPTION: NW 1/4, Section 7, T 11N, R2E

CITY ADDRESS: Irving Blvd NW.

ENGINEERING FIRM: DENNY GROSS & ASSOC CONTACT: Kent Frier

ADDRESS: 2400 Comanche Rd. PHONE: 884-0696

OWNER: ~~FEVINC~~ Southwest Invest. R. CONTACT: Mike Castillo

ADDRESS: 2727 San Pedro Dr. NE PHONE: 883 3070

ARCHITECT: Claudio A. Vigil CONTACT: Warren Shaw

ADDRESS: 2340 Alamo Ave. S.E. PHONE: 247-1000

SURVEYOR: Denny Gross & Assos CONTACT: steve Youtsey

ADDRESS: (same) PHONE:

CONTRACTOR: Jaynes Corp CONTACT: Don Johnson

ADDRESS: 2906 Broadway NE PHONE: 345-8591

PRE-DESIGN MEETING:

X YES

___ NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

RECEIVED
JUN 25 1985
HYDROLOGY SECTION

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

___ DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

X GRADING PLAN

X 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

X ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: 6/25/85

BY: Don Johnson

B. H. SWINBURNE, CHAIRMAN
WILLIAM V. HEREFORD, VICE-CHAIRMAN
FRANCES McCOY, SECRETARY-TREASURER
EDWARD HUNNICUTT, DIRECTOR
REX FUNK, DIRECTOR

RICHARD E. LEONARD
EXECUTIVE ENGINEER

Albuquerque
Metropolitan
Arroyo
Flood
Control
Authority

P. O. BOX 25851 - ALBUQUERQUE, N. M. 87125
TELEPHONE 884-2215

RECEIVED
JUL 23 1985
DH0248
HYDROLOGY SECTION

July 22, 1985

MEMO TO: Billy Goolsby, Hydrology

FROM: AMAFCA Dan Sabo

SUBJECT: Irving Business Park - Construction Plan Review Submittal of 6/18/85

We have reviewed the plans but our comments are confined to the rundowns shown on Sheet 10.

Pipe Profile - provide an endwall to support the last joint of pipe where it joins the riprap.

Concrete Rundown - increase depth of rundown from 1'-0" to 1'-6". Most of our failures with this type occur at the juncture of the rundown with the earth embankments. Inlet details are not shown; therefore, we would like the opportunity to review those details again when Phase II plans become final.

ic
cc: Kent Freier, Denny, Tibljas, McLain & Assoc.

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

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 768-7644

July 26, 1985

Mr. Kent Freier
Denny, Tibbjas, McLean & Associates
2400 Comanche Road NE
Albuquerque, NM 87107

REF: REVISED DRAINAGE REPORT FOR IRVING BUSINESS PARK (B13-D1)
RECEIVED JUNE 18, 1985

Dear Mr. Freier:

I apologize for not responding earlier. I had been waiting for a response from AMAFCA since the site is adjacent to the Calabacillas Arroyo. The response I received identified that you have already received comments from that agency.

Consequently, I am writing this letter to reflect only City response. I do agree with the comments from AMAFCA. Please inform me of your response.

The above referenced submittal, dated June 18, 1985, is approved for building permit for Phase I.

Please attach a copy of this approved Phase I plan to the construction set prior to Hydrology sign-off.

Also, please be advised that coordination with an approval by AMAFCA will be required for Certificate of Occupancy for the proposed outlet structure into the arroyo.

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

Cordially,

Billy J. Goolsby

Billy J. Goolsby, PE
Civil Engineer/Hydrology

BJG:mrk

dtm & associates, inc
Denney-Tibljas-McLean & Associates, Inc.
Consulting Engineers ■ Planners ■ Surveyors

December 26, 1985

HAND DELIVERED

Mr. Fred Aguirre
Hydrology Department
City of Albuquerque
Second and Central, NW
Albuquerque, NM 87103

RECEIVED
DEC 30 1985
HYDROLOGY SECTION

Re: Final Plat Sign Off, Tract "S"
DRB No. 85-622
DTM Job No. 802.12

Dear Fred:

Pursuant to your request for final plat sign off for the subject tract, the following information is submitted.

The following private infrastructures have been constructed per plans:

1. The sewer improvements have been installed, tested, and accepted by New Mexico Utilities. Mr. Jon Ertsgaard of Water Utilities is prepared to sign the final plat.

2. The water improvements have been installed, tested and accepted by New Mexico Utilities. Mr. Jon Ertsgaard is prepared to sign the final plat.

3. The street improvements have been built per the plans and I have enclosed the test data for these improvements.

   The question of public or private access easement has been resolved to be private per the enclosed Deed of Trust.

4. The Grading and Drainage facilities have been completed through Phase I per the plans. Differences and explanations are indicated on the comparative infrastructure list enclosed. The Grading and Drainage was completed through Station 4+25± in order to construct the building on Tract "B", or Phase I.

2400 COMANCHE ROAD, NE ■ ALBUQUERQUE, NM 87107
TELEPHONE (505) 884-0696

5. The comparative infrastructure lists differ in two areas. First, some of the quantities were overestimated, and secondly, the access roadway list in "Public" has been shifted to "Private".

Should you have any questions concerning the above, please feel free to call.

Very truly yours,

Bill McLean

WML/klb
Enclosures

I, Bill McLean, a Registered Professional Engineer, New Mexico No. 5125, to the best of my knowledge and belief do hereby certify that the enclosed drawing, permit, infrastructure list, testing results and Trust Deed are correct and the project has been built through Phase I as has been described in the letter above. Since we did not monitor the construction of the project this certification constitutes neither a guarantee nor a warranty, expressed or implied; but is solely an expression of professional opinion gathered after the completion of the construction.

Bill McLean
N.M.P.E. No. 5125

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

RECEIVED
DEC 27 1985
HYDROLOGY SECTION



PERMIT FOR EXCAVATION & CONSTRUCTION, CITY OF ALBUQUERQUE ENG 23487

LOCATION: 6 Irving Business Park, 9987 Irving N.W. — DATE: 10-10-85

SW	SP. MAN.	CC OK TRAFFIC	SEWER TAP	SEWER EXT. 10 A	WATER CUT	WATER EXT.
NEW SERVICE	NEW YD. LINES	B/W CURBS	MAIN LEAK	OTHER:		
SW 4'	6'	TO PROPERTY	CURB	CITY TO REPAVE/SURFACE: YES	NO	
LENGTH	WIDTH	TOTAL	NO. OF EX.	PAVED	UNPAVED	

STARTING DATE: 10-10-85 — COMPL. DATE: 11-10~~XXXXXX~~ 85 — PERMIT EXPIRES: 10-20-85

INSURANCE EXP.: 09-01-86 — BOND EXPIRES: 12-85 — QUALIFIED: Don Johnston

SPECIAL CONDITIONS: 45' curb cut

VOID UNTIL VALIDATED BY CITY TREASURER

Construction Fee $	18.00	Cr. 443008 - 5253000
Excavation Fee $	26.00	Cr. 443008 - 5253000
Restoration Fee $	N/C	Cr. 461801 - 8233000
Total Fee $	44.00	

Restoration Fee Required	YES	NO	BY
		XX	bes

PERMIT IS APPROVED FOR WORK DESCRIBED ABOVE IN ACCORDANCE WITH ARTICLES 8-6 AND 8-7 R.O. 1974

State License	Date	City License	Date

APPLICANT	ADDRESS	PHONE NO.
Jaynes Corporation Inc.	2906 Broadway Blvd. N.E.	345-8591

SIGNATURE: Ron Johnson — APPROVED CITY ENGINEER: bes — BLUE STAKE NUMBER: #960

Permit is granted in consideration of the permittee assuming all liability, defending, and holding the City harmless for claims for damages or injury to persons or property resulting from permittee's excavation work.

CONTR _____ CODE _____

CAUTION: PROTECT UNDERGROUND UTILITIES
CALL 765-1234, 48 HOURS IN ADVANCE FOR LINE STAKING

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

DATE: 10-11-85

CITY OF ALBUQUERQUE
TRAFFIC ENGINEERING DIVISION
BARRICADING OR DETOURING PERMIT

96 ZONE: _____

LOCATION: 9987 Irving NW

CONTRACTOR: Jaynes Corp.

BARRICADING BY: (C.T.C.S.) WARNING LITES CONTRACTOR

PERMIT IS VALID: DATE: 10-14-85 TO 10-19-85

TIME: ☐ 9AM to 4PM Only ☒ 24 Hours Per Day ☐ _____

DETOUR PLAN SUBMITTED ☒ YES CT 101 ☐ NO _____

DESCRIPTION OF JOB: Curb cut, drive pad 45'

Permit holder must conform to all applicable City Regulations/Ordinances. All excavations must be patched or plated prior to opening to traffic.

Issued By: Ronald C. Hassett

PRIVATE INFRASTRUCTURES
FOR
IRVING BUSINESS PARK
DTM JOB NO. 802.12
DRB #85-622
December 24, 1985

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

ACCESS ROADWAY	ESTIMATED	ACTUAL
Water:		
10" Waterline	1890 ± l.f.	1888 l.f.
8" Waterline	252 ± l.f.	181 l.f.
Fire Hydrant	* 5 ea.	2 ea.
Water Services	4 ea.	4 ea.
Sewer:		
21" Sewerline	694 ± l.f.	700 l.f.
6" Sewerline	95 ± l.f.	55 l.f.
4" Sewerline	220 ± l.f.	120 l.f.
4' Manholes	1 ea.	2 ea.
Drainage:		
15" RCP	465 ± l.f.	130 l.f.
Catch Basin Single Grate	4 ea.	1 ea.
Catch Basin Double Grate	1 ea.	1 ea.
Riprap Splash Pads	-------	15 c.y.
Street:		
Concrete Curb & Gutter	2292 ± l.f.	2736 l.f.
Concrete Header Curb	240 ± l.f.	-------
Pavement	3756 ± s.y.	4929 s.y.
Concrete Valley Gutter	75 ± l.f.	304 s.f.
Concrete Drive Pad	120 ± s.f.	-------
Temporary Asphalt Curb	-------	67 l.f.

*Remaining 3 to be built in future development.

PUBLIC INFRASTRUCTURES
FOR
IRVING BUSINESS PARK
DTM JOB NO. 802.12
DRB #85-622
December 24, 1985

ACCESS ROADWAY	ESTIMATED	ACTUAL
Street:		
Concrete Curb & Gutter	570 ± l.f.	0
Pavement	1044 ± s.y.	0
Concrete Valley Gutter	41 ± l.f.	721 s.f.

GEO-TEST

November 7, 1985

Job No. 85-1077
Lab No. L-411

Denney, Tibijas & McLean
2400 Comanche, N.E.
Albuquerque, NM 87107

Attention: Mr. Bill McCormick

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

PROJECT: Irving Business Center

SUBJECT: Extraction, Sieve Analysis and Marshall Specimens on Asphaltic Concrete Surface Course from east bound lane of Irving Park, Station 10+00, sampled by Geo-Test, Inc. on October 31, 1985.

EXTRACTION AND SIEVE ANALYSIS

Sieve Size	Percent Passing	APWA 1979, Grading 'C' Specifications
1/2"	100	100
3/8"	94	70-100
No. 4	46	45-70
No. 10	36	35-50
No. 40	18	-
No. 80	8	-
No. 200	3.7	4-10
Percent Asphaltic Cement	5.1	5-7

MARSHALL SPECIMENS (75-BLOWS, ASTM D-1559)

Actual Specific Gravity	2.364	
Theoretical Specific Gravity	2.440	
% A.C. by Volume	12.24	
Voids Total Mix (Percent)	3.11	3-7
Percent Voids Filled	79.7	75-85
Unit Weight (pcf)	147.5	
Marshall Stability (lbs.)	2430	1500 min.
Marshall Flow (1/100 inch)	14	16 max.

Submitted by:
GEO-TEST, INC.

Larry L. Renfro
Materials & Testing Division Manager

Copies: Addressee (2)
Jaynes Corporation

GEO-TEST
OF
ALBUQUERQUE
INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

GC file
802.12
WRM

GEO-TEST

November 7, 1985

Job No. 85-1077
Lab No. L-411

Denney, Tibijas & McLean
2400 Comanche, N.E.
Albuquerque, NM 87107

Attention: Mr. Bill McCormick

PROJECT: Irving Business Center

SUBJECT: Extraction, Sieve Analysis and Marshall Specimens on Asphaltic Concrete Surface Course from east bound lane of Irving Park, Station 10+00, sampled by Geo-Test, Inc. on October 31, 1985.

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Marshall Flow (1/100 inch)	14	16 max.

Submitted by:
GEO-TEST, INC.

Larry L. Renfro
Materials & Testing Division Manager

Copies: Addressee (2)
Jaynes Corporation

GEO-TEST
OF
ALBUQUERQUE
INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

GC file
802.12

GEO-TEST

October 29, 1985

Job No. 85-1077

Denney, Tibijas & McLean
2400 Comanche, N.E.
Albuquerque, NM 87107

Attention: Mr. Bill McCormick

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

PROJECT: Irving Business Center

Results of Field Density Tests (Nuclear Method) 10/28/85

Test No.	Location	Den. of Asphalt (pcf)	Moist. Per.	Mar.Den. (pcf)	Op.Moist. Percent	Per. Den.	Per. Spec.
5A	W bound lane of Irving Park, Sta. 13+60 (RETEST) ACBC	142.5	-	147.9	-	96.3	96
6A	E bound lane of Irving Park, Sta. 12+70 (RETEST) ACBC	142.9	-	147.9	-	96.6	96
7A	Centerline of Irving Park, Sta. 10+55 (RETEST) ACBC	142.2	-	147.9	-	96.1	96
8A	W bound lane of Irving Park, Sta. 7+00 (RETEST) ACBC	143.7	-	147.9	-	97.2	96

Submitted by:
GEO-TEST, INC.

Larry L. Renfro
Materials & Testing Division Manager

Copies: Addressee (2)
Jaynes Corporation

GEO-TEST, INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

80212
GCfk
WRM

GEO-TEST

October 28, 1985

Job No. 85-1077
Lab No. L-390

Denney, Tibijas & McLean
2400 Comanche, N.E.
Albuquerque, NM 87107

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

Attention: Mr. Bill McCormick

PROJECT: Irving Business Center

SUBJECT: Extraction, Sieve Analysis and Marshall Specimens on Aspahltic Concrete Base Course from Station 13+00 on west bound lane of Irving Park, sampled by Geo-Test, Inc. on October 23, 1985.

EXTRACTION AND SIEVE ANALYSIS

Sieve Size	Percent Passing	APWA 1979 Grading 'A' Specifications
1"	100	100
3/4"	98	80-100
1/2"	74	65-90
3/8"	63	55-75
No. 4	47	40-60
No. 10	41	32-45
No. 40	21	-
No. 80	9	-
No. 200	4.6	4-9
Percent Asphaltic Cement	5.1	4-7

MARSHALL SPECIMENS (75-BLOWS, ASTM D-1559)

Actual Specific Gravity	2.370	
Theoretical Specific Gravity	2.436	
% A.C. by Volume	11.97	
Voids Total Mix (Percent)	2.71	4-7
Percent Voids Filled	81.5	65-80
Unit Weight (pcf)	147.9	
Marshall Stability (lbs.)	3500	1500 min.
Marshall Flow (1/100 inch)	12	16 max.

Submitted by:
GEO-TEST, INC.

Larry L. Renfro
Materials & Testing Division Manager

Copies: Addressee (2)

GEO-TEST, INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

802.12
GC file
WPM

GEO-TEST

October 28, 1985

Job No. 85-1077
Lab No. L-383

Denney, Tibijas & McLean
2400 Comanche, N.E.
Albuquerque, NM 87107

Attention: Mr. Bill McCormick

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

PROJECT: Irving Business Center

LOCATION OF SAMPLE: Center cul-de-sac, natural ground

DATE SAMPLED: 10/18/85

SAMPLE: fine-grained SAND, trace silt, light brown (SP)

Moisture Density Relationship - ASTM D-1557, Method A

Maximum Dry Density	106.0 pcf
Optimum Moisture	10.4 percent

Sieve Analysis

Sieve Size	Percent Passing
No. 10	100
No. 40	97
No. 80	27
No. 200	2.8

Atterberg Limits

Liquid Limit	NV
Plasticity Index	NP

Submitted by:
GEO-TEST, INC.

Larry L. Renfro
Materials & Testing Division Manager

Copies: Addressee (2)
Jaynes Corporation

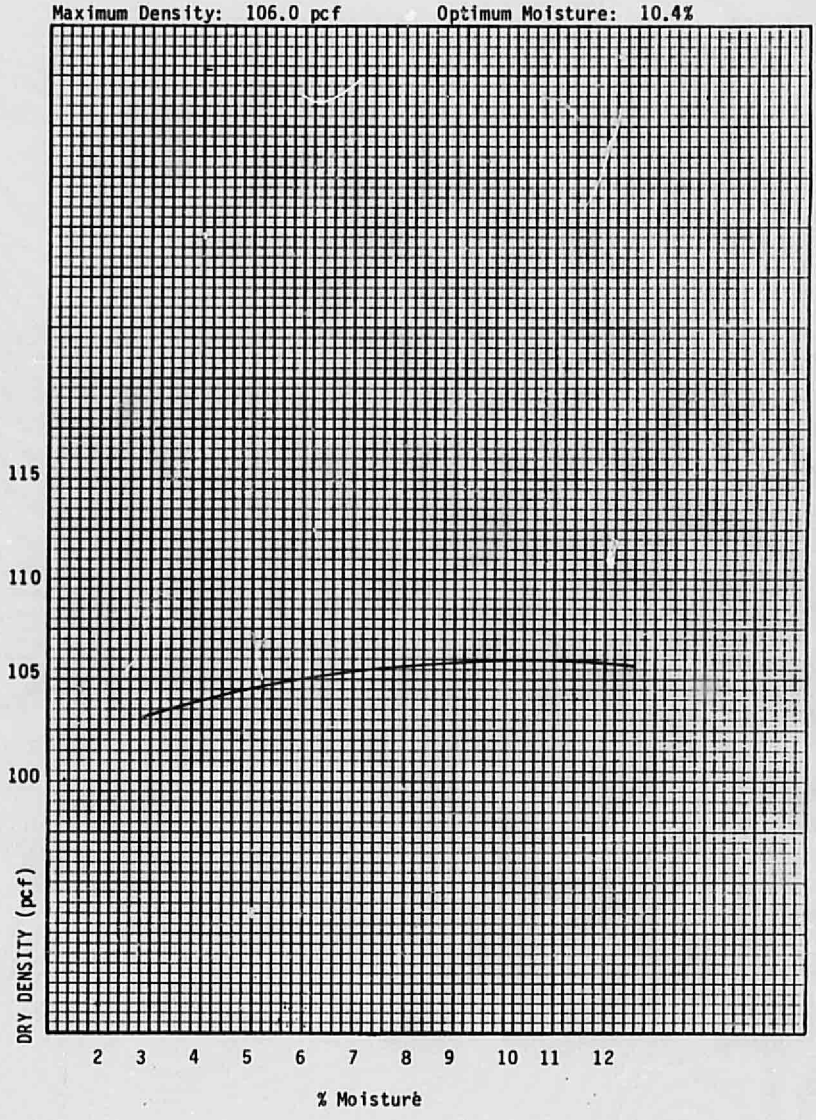
GEO-TEST, INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

802.12
WOM
GC file

Job No. 85-1077
Lab No. [illegible]-383
Irving [illegible]siness Center

GEO-TEST

Maximum Density: 106.0 pcf Optimum Moisture: 10.4%



GEO-TEST, INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

GEO-TEST

October 23, 1985 Job No. 85-1077

Denney, Tibijas & McLean
2400 Comanche, N.E.
Albuquerque, NM 87107

Attention: Mr. Bill McCormick

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

PROJECT: Irving Business Center

Results of Field Density Tests (Nuclear Method) 10/22/85

Test No.	Location	Den. of Asphalt (pcf)	Moist. Per.	Max.Den. (pcf)	Op.Moist. Percent	Per. Den.	Per. Spec.
5	W bound lane of Irving Park Station 13+60 ACBC	139.9	-	147.9	-	94.6	95
6	E bound lane of Irving Park Station 12+70 ACBC	137.2	-	147.9	-	92.8	95
7	Centerline of Irving Park Station 10+55 ACBC	139.7	-	147.9	-	94.5	95
8	W bound lane of Irving Park Station 7+00 ACBC	139.8	-	147.9	-	94.5	95

Failed

Submitted by:
GEO-TEST, INC.

Larry L. Renfro
Materials & Testing Division Manager

Copies: Addressee (2)
Jaynes Corporation

upm
ce file
808-12

GEO-TEST, INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

802.12
const.

GEO-TEST

October 22, 1985 Job No. 85-1077

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

RECEIVED
OCT 24 1985
DENNEY-TIBIJAS-McLEAN & ASSOCIATES, INC.

Denney, Tibijas & McLean
2400 Comanche, N.E.
Albuquerque, NM 87107

Attention: Mr. Bill McCormick

PROJECT: Irving Business Center

Results of Field Density Tests (Nuclear Method) 10/21/85

Test No.	Location	Den. (pcf)	Moist. Per.	Max.Den. (pcf)	Op.Moist. Percent	Per. Den.	Per. Spec.
1	Center of cul-de-sac of Irving Park FSG	106.7	9.1	106.0	10.6	100.7	95
2	E bound lane of Irving Park, Sta. 4+25, FSG	101.1	9.0	106.0	10.6	95.4	95
3	Centerline of Irving Park, Sta. 10+00, FSG	107.9	13.7	106.0	10.6	101.8	95
4	W bound lane of Irving Park, Sta. 12+60, FSG	101.5	8.6	106.0	10.6	95.8	95

Submitted by:
GEO-TEST, INC.

Larry L. Renfro
Materials & Testing Division Manager

Copies: Addressee (2)
Jaynes Corporation

GEO-TEST, INC.
3609 PALO
DURO N.E.
ALBUQUERQUE,
NEW MEXICO
87110
(505) 883-0074

802.12
GC

CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

INTER-OFFICE CORRESPONDENCE October 14, 1985 REF NO._____

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

TO: Mike Castillo

FROM: Richard Dineen, Senior Planner, Chairman, Development Review Board

SUBJECT: Irving Business Park Subdivision, DRB-85-622

This is to confirm that DRB-85-622 was granted Preliminary Plat approval by the Development Review Board on October 8, 1985, with the approval of the amended infrastructure listing. Final Plat approval will be granted upon implementation of the infrasture list or bonding of the infrastructure improvements to be completed within one year.

An extension may be obtained for an additional year, if requested before expiration of the first year. If you have any questions, please feel free to call me.

tc/1440L

New Mexico Utilities Inc.
10001-A Coors Rd. N.W.
Albuquerque, New Mexico 87114
(505) 898-2661

RECEIVED
DEC 02 1985
JAYNES CORP.

November 26, 1985

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

Jaynes Corporation
2906 Broadway, NE
Albuquerque, NM 87107

Attention: Don Johnson

Gentlemen:

Water and sewer facilities within the Irving Business Park near Irving Boulevard and Chantilly Road have been completed and materials and workmanship met the requirements of New Mexico Utilities, Inc.

Sincerely,

J. L. Williams
President and
General Manager

JLW:js

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87110

When recorded, return to

369

Deed of Trust

TO

Trustee for

STATE OF N. Mex.
County of Bern } ss.

I hereby certify that this instrument was filed for record on the 12 day of Oct, A.D. 1973, at 3:16 o'clock P M., and was duly recorded in Book M-57 A Page 363 362 this 19 day of Oct A.D. 1973

Lawrence Sanchez
County Clerk.

By _____ Deputy.

THE VALLIANT CO. ALBUQUERQUE-ROSWELL

RECEIVED
DEC 27 1985
HYDROLOGY SECTION

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

DEED OF TRUST—FORM 1360 REV. 10-69

RETURN TO:
NEW MEXICO TITLE CO. 363

This Indenture made this 10th day of October A.D. 19 96,649 73, by and

between SPRINGER CORPORATION 78656

(hereinafter, whether singular or plural, or masculine, feminine or neuter, called "Mortgagor", and sometimes referred to by the singular neuter pronoun) and ALBUQUERQUE NATIONAL BANK

(hereinafter, whether singular or plural, or masculine, feminine or neuter, called "Trustee", and sometimes referred to by the singular neuter pronoun), WITNESSETH:
WHEREAS, the Mortgagor is indebted to

HORIZON CORPORATION and as evidence thereof has made, executed, and delivered to said

HORIZON CORPORATION

certain note of even date herewith, described as follows, to-wit:

$ 48,000.00

Albuquerque, New Mexico
October 10, 1973

REAL ESTATE MORTGAGE NOTE
(For individual borrower. Installments include interest.)

After date, as hereinafter set forth, for value received, I, we, or either of us, promise to pay to the order of

Horizon Corporation

at Albuquerque, New Mexico-Albuquerque National Bank, Main

the sum of Forty-eight Thousand and no/100th---------- Dollars ($ 48,000.00)
in manner following, that is to say:

Five Hundred Seventy-five and no/100th---------- Dollars ($ 575.00)

on the 1st day of November 19 73, and Five Hundred Seventy-five and no/100th---------- Dollars ($ 575.00) on the 1st day of each and every month thereafter until the entire balance hereof with the interest thereon, as hereinafter set forth, shall have been fully paid.

The said monthly installments of $ 575.00 shall include interest on said principal amount and/or on the unpaid balance thereof at the rate of Eight per centum (8 %) per annum, and when said installments are paid, they shall be apportioned between interest and principal, and applied first to the payment of all interest due at date of payment, and the balance applied on the principal amount.

And I, we, or either of us, agree, in case of default of the payment of any of said installments, when, by the terms hereof, the same shall fall due, that such installments shall bear interest from the date of their respective maturities until paid at the rate of ten per cent (10%) per annum; and that, if any one of said installments or any interest due thereon is not paid within ten days after the same becomes due and payable, the whole of the principal sum then remaining unpaid, together with the interest that shall have accrued thereon, shall forthwith become due and payable without notice or demand, at the option of the holder of this note, with ten per cent (10%) additional on amount unpaid should this note be placed in the hands of an attorney for collection. The makers, endorsers, and sureties hereof hereby severally waive protest, demand, presentment, notice of dishonour, and notice of protest in case this note, or any installment due thereunder, is not paid at maturity, and agree that after maturity of this obligation, or any installment thereof, the time of making payment of the same may be extended without prejudice to the holder and without releasing any maker, endorser, or surety hereof.

This note is secured by a Real Estate Deed of Trust or Real Estate Mortgage bearing even date herewith.

The maker ..... reserve ..... the right to pay two or more installments at any time.

SPRINGER CORPORATION

By: [signature]

W. A. CLARKE - PRESIDENT

Form 113 (Rev. 6/66) The Valliant Co. Albuquerque, N. M.

payable at as described in the Note

with interest at the rate of per cent (%) per annum from date until paid, interest payable

In case of default in the payment of any of said installments, when the same shall fall due, such installments shall bear interest from the date of their respective maturities until paid at the rate of per cent (%) per annum; and if any one of said installments or any interest due thereon is not paid within ten days after the same becomes due and payable, the whole of the principal sum then remaining unpaid, together with the interest that shall have accrued thereon, shall forthwith become due and payable without notice or demand at the option of the holder of the said note , with ten percent additional on amount unpaid should the said note be placed in the hands of an attorney for collection.

WHEREAS, the Mortgagor desires to secure the payment of said indebtedness;

NOW, THEREFORE, in consideration of the premises and of the sum of One Dollar ($1.00) to it in hand paid, the receipt whereof is hereby acknowledged, the Mortgagor has granted, bargained, sold, and conveyed, and does hereby grant, bargain, sell, and convey, unto

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

365

Beginning for a tie at a point in Bernalillo County, State of New Mexico, on the South boundary of the Town of Alameda Grant, which is on the section line common to Section 13, T. 11 N., R. 2 E., and Section 18, T. 11 N., R. 3 E., N.M.P.M., thence N 22 deg. 00'52" E., 6361.38 feet to the Southeast corner of the tract herein described; thence N 57 deg. 55'28" W., 700.00 feet;

366

Grantor further grants to grantee permanent access across a fifty foot strip of property running from the Southeast corner of the above described property to Irving Boulevard.
Grantor further grants to grantee the right to use the existing road running from the above described property in a westerly direction to Golf Course Road.
SUBJECT TO: Reservations, restrictions and easements of record. Taxes

367

Together with all and singular the hereditaments and appurtenances thereto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues, and profits thereof, and all the estate, right, title, interest, claim, and demand whatsoever of the Mortgagor, either in law or equity, of, in, and to the above bargained premises, with the hereditaments and appurtenances; TO HAVE AND TO HOLD said premises above bargained and described, with the appurtenances, unto the Trustee and its successors in trust, forever, in trust for the uses and purposes hereinafter mentioned.

And the Mortgagor, for itself, its legal representatives, successors, and assigns, hereby covenants with the Trustee and its successors in trust, as follows:

1. That, at the time of the ensealing and delivery of these presents, the Mortgagor is well seized of the premises above conveyed of a good, sure, perfect, absolute, and indefeasible estate of inheritance in law and in fee simple, and has good right, full power, and lawful authority to grant, bargain, sell, convey, and encumber the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, and encumbrances of whatsoever kind and nature, except

as described above

and that the Mortgagor shall and will forever warrant and defend the same to the Trustee and its successors in trust against the lawful claims and demands of all persons, except as in this paragraph stated;

2. That the Mortgagor will pay promptly when due the indebtedness evidenced as aforesaid and the interest thereon;

3. That the Mortgagor will pay promptly when due all indebtedness, principal and interest, secured by any and all prior and superior mortgages, if any, and all taxes and assessments, rent, and charges, and all laborers', mechanics' or materialmen's or other liens of every name and nature which shall be levied or imposed upon said real estate, or upon or on account of this indenture, or the indebtedness secured hereby, or upon the interest or estate in said property represented by this mortgage, whether levied or assessed or imposed against the Mortgagor, or otherwise;

4. That the Mortgagor will keep all destructible property described herein, or situated upon the lands described herein, insured against loss and damage by fire and such other risks and hazards as the Trustee may from time to time specify, all in responsible insurance companies approved by the Trustee, in an amount not less than the amount of the indebtedness secured hereby, with loss payable by any insurer to the Trustee as its interest created hereby may appear, and will pay promptly the premiums therefor, and will deliver said policies, as soon as issued, to the Trustee;

5. That the Mortgagor will keep all buildings and improvements on said premises in good and substantial repair, and will make no alterations therein (except to keep them in good repair) without the written consent of the Trustee, and will commit no waste upon said premises and, if the Mortgagor shall neglect so to keep in repair, the Trustee may, at its discretion, enter upon said premises from time to time and repair and keep in repair said buildings and improvements without thereby becoming liable as a Mortgagee in possession, and that the expense of so doing shall be repaid by the Mortgagor on demand, with interest at the rate of 10% per annum, and, until so re paid, shall become and be as much additional indebtedness secured hereby;

6. That the Trustee shall have the right at any time by it deemed necessary to incur expense in procuring and/or continuing an abstract of title to said premises, or other showing of the title, and any expense so incurred shall be repaid by the Mortgagor, with interest at the rate of 10% per annum, and, until so repaid, shall be as much additional indebtedness secured hereby;

7. That if the Mortgagor shall make default in the payment of any of the aforesaid taxes, assessments, rates, charges, mortgages, and liens, or in procuring and maintaining insurance as above covenanted, the Trustee, or any payee of the indebtedness secured hereby, at its option, may pay such taxes, assessments, rates, charges, mortgages or liens, and effect and maintain such insurance, and the sum or sums so paid shall be repaid by the Mortgagor to the Trustee or payee on demand, and, until so repaid, shall bear interest at the rate of 10% per annum and shall be a further lien on the aforesaid property and premises as to such additional indebtedness secured by this indenture;

8. That, in case of the breach or default in the performance by the Mortgagor of any covenant herein contained, all of the indebtedness secured by this instrument, whether the same shall be due and payable according to the tenor and effect of any promissory note secured hereby or not, and anything herein to the contrary notwithstanding, shall, at the option of the Trustee, or of the payee of the indebtedness secured hereby, immediately become and be due and payable without notice to the Mortgagor of such option or election; PROVIDED, that if the indebtedness secured be evidenced by more than one promissory note, such election may be made either by the

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9. That, in case of any suit or proceeding at law or in equity, or in any probate or administration proceeding, wherein the Trustee or any payee of the indebtedness secured hereby shall become a party by reason of being interested in the premises as Trustee or as such payee, or for any purpose other than for the collection of the indebtedness secured hereby or the foreclosure of this indenture, there shall accrue hereunder and be paid by the Mortgagor all reasonable costs, charges, attorney's and solicitor's fees thereby occasioned, and the same shall be a further charge and lien on said premises secured hereby, and shall draw interest at the rate of 10% per annum from the date of such accrual until paid;

10. That the Mortgagor will pay to the Trustee, in addition to all of the other indebtedness secured hereby, ten per cent on the amount of such other indebtedness then due and payable as attorney's fees whenever any application to any Court or Referee shall be made to compel the payment of the indebtedness secured hereby, or any part thereof, or to realize on the security created hereby, whether by foreclosure or otherwise, and whether the proceeding, suit or actions be instituted in the first instance by the Trustee, or by any payee of the indebtedness secured hereby, or otherwise, and the amount of such attorney's fee shall be so much additional indebtedness likewise secured hereby;

11. That, whenever any application to any Court or Referee shall be made to compel the payment of the indebtedness secured hereby, or any part thereof, or to realize on the security created hereby, whether by foreclosure or otherwise, and whether the proceeding, suit or action be instituted in the first instance by the Trustee, or by any payee of the indebtedness secured hereby, or otherwise, the Trustee and those for whose benefit this security is held shall be entitled, without notice to the Mortgagor, to the immediate appointment of a receiver to take possession and control of said premises, and collect, receive and apply the rents, issues and profits thereof, during foreclosure and period of redemption, under direction of the Court appointing such receiver, and all such rents, issues and profits, as may accrue during the term of this instrument, are hereby specifically assigned and pledged as additional security for the payment of the indebtedness aforesaid, with the understanding, however, that so long as the Mortgagor is not in default of performance of any covenant herein contained, it may collect, use and enjoy the rents, and profits aforesaid;

12. In case the Mortgagor, its legal representatives and assigns, shall well and truly keep and perform each and all of the covenants herein contained, this indenture shall become void and of no effect, but in case of default in the due and proper performance of said covenants, or any of them, then, and in that case, this indenture shall remain and be in full force and effect and may be foreclosed immediately in any Court of competent jurisdiction, and thereupon the net proceeds of foreclosure sale shall be applied toward the payment of the indebtedness secured hereby. Any persons interested in the proceeds, or any part thereof, of such foreclosure sale shall be entitled to become a purchaser, and, in such event, at the option of such purchaser, he shall be entitled to a credit on the purchase price in the amount of his interest in such proceeds, except that all costs adjudged payable to others than the purchaser shall be paid in cash;

13. When the indebtedness secured hereby shall have been fully paid, this indenture shall, on demand of the Mortgagor, its legal representatives or assigns, and upon payment to the Trustee of the sum of One and 50/100 Dollars ($1.50) therefor, be released by the Trustee without expense to the Trustee or payee for the recording of such release;

14. In case of the resignation, refusal, failure, or inability of the Trustee at any time to act, the then acting Sheriff of the county in which said real estate is situated shall be and he hereby is appointed and made successor in trust, with all of the rights, powers, and duties of the Trustee as herein empowered, to the same extent as if he had been specifically named herein as Trustee, and any person dealing with or concerning said real estate and premises or with said Sheriff as successor trustee shall not be required to inquire into the inability of the original Trustee to act, and, as to such person, it shall be conclusively presumed that such successor trustee at the time of his act had all the powers, rights, and duties herein granted to and imposed upon the original Trustee;

15. All of the grants, agreements, and covenants of the Mortgagor herein contained shall be binding upon the heir, executors, administrators and assigns of the Mortgagor, if the Mortgagor be one or more natural persons, and upon the successors and assigns of the Mortgagor, if the Mortgagor be one or more corporations, as well as upon the Mortgagor, and shall inure to the benefit of the Trustee and of every successor Trustee. The term "Payee" as used herein shall be construed to include any person, firm or corporation entitled, for the time being, to receive payment of the indebtedness secured hereby, or any part thereof, and the Trustee may be a payee without modifying or impairing its capacity as Trustee.

IN WITNESS WHEREOF, the Mortgagor has executed this indenture the day and year first above written.

SPRINGER CORPORATION

By: W. A. CLARKE - PRESIDENT

ACKNOWLEDGMENT FOR NATURAL PERSONS

STATE OF NEW MEXICO }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 19__

by _____
(Name or Names of Person or Persons Acknowledging)

My commission expires:
(Seal)

_____
Notary Public

ACKNOWLEDGMENT FOR CORPORATION

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } ss.

The foregoing instrument was acknowledged before me this 9th day of September, 19 73

by W. A. CLARKE, President of Springer Corporation
(Name of Officer) (Title of Officer) (Name of Corporation Acknowledging)

a New Mexico corporation, on behalf of said corporation.
(State of Incorporation)

My commission expires:
(Seal)

William H. Deckler
Notary Public

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

R. 3 E., N.M.P.M., thence N 22 deg. 00'52" E., 6361.38 feet to the Southeast corner of the tract herein described; thence N 57 deg. 55'28" W., 700.00 feet; thence N 73 deg. 28'49" W., 400.00 feet; thence N 53 deg. 08'51" W., 480.00 feet to the Southwest corner of this tract; thence N 36 deg. 51'09" E., 277.79 feet to the Northwest corner of this tract; thence S 57 deg. 11'00" E., 388.87 feet; thence N 89 deg. 49'00" E., 338.45 feet; thence S 60 deg. 32'30" E., 555.45 feet; thence S 36 deg. 44'30" E., 122.50 feet; thence S 19 deg. 31'30" E., 371.21 feet to the Northeast corner of this tract; thence S 66 deg. 56'23" W., 165.34 feet to the point of beginning containing 12.870 acres, more or less. And more particularly described as follows:

Tract "B" as the same is shown and designated on Corrected Land Division Map of a portion of Paradise Hills Development Area, Bernalillo County, New Mexico, said Corrected Land Division Map having been filed in the Records of Bernalillo County on September 5, 1973, Volume D-5, Folio 178.

for the current and subsequent years.
SUBJECT TO: The terms, provisions, conditions, restrictions, stipulations, and the charges and assessments imposed thereunder of that certain Water System Agreement dated January 14, 1961, recorded September 20, 1961, in Book Misc. 35, Page 559, records of Bernalillo County, New Mexico, and of that certain Sewer System Agreement dated January 14, 1961, recorded September 20, 1961, in Book Misc. 35, Page 527, records of Bernalillo County, New Mexico.
SUBJECT TO: Reservation of one-half of all oil, gas, uranium and other minerals as reserved in Warranty Deed recorded in Book D 513, Page 189, records of Bernalillo County, New Mexico.

ENVIRONMENTAL RESTRICTIONS:

A. Rock crushing operations will not be allowed.
B. Grantee agrees to comply with all City, County, State and Federal regulations and/or standards which now exist or which may be promulgated in the future regarding air, water, noise, soil, or other form of pollution, as defined by any applicable statute, regulation or standard.
C. Any concrete batching plant or other industrial operation shall be obscured from all directions by landscaping with a minimum requirement of dense foliage maturing to fifteen (15) feet in height.

[illegible] trust, as follows:

1. That, at the time of the ensealing and delivery of these presents, the Mortgagor is well seized of the premises above conveyed of a good, sure, perfect, absolute, and indefeasible estate of inheritance in law and in fee simple, and has good right, full power, and lawful authority to grant, bargain, sell, convey, and encumber the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, and encumbrances of whatsoever kind and nature, except

as described above

and that the Mortgagor shall and will forever warrant and defend the same to the Trustee and its successors in trust against the lawful claims and demands of all persons, except as in this paragraph stated;

2. That the Mortgagor will pay promptly when due the indebtedness evidenced as aforesaid and the interest thereon;

3. That the Mortgagor will pay promptly when due all indebtedness, principal and interest, secured by any and all prior and superior mortgages, if any, and all taxes and assessments, rent, and charges, and all laborers', mechanics' or materialmen's or other liens of every nature and nature which shall be levied or imposed upon said real estate, or upon or on account of this indenture, or the indebtedness secured hereby, or upon the interest or estate in said property represented by this mortgage, whether levied or assessed or imposed against the Mortgagor, or otherwise;

4. That the Mortgagor will keep all destructible property described herein, or situated upon the lands described herein, insured against loss and damage by fire and such other risks and hazards as the Trustee may from time to time specify, all in responsible insurance companies approved by the Trustee, in an amount not less than the amount of the indebtedness secured hereby, with loss payable by any insurer to the Trustee as its interest created hereby may appear, and will pay promptly the premiums therefor, and will deliver said policies, as soon as issued, to the Trustee;

5. That the Mortgagor will keep all buildings and improvements on said premises in good and substantial repair, and will make no alterations therein (except to keep them in good repair) without the written consent of the Trustee, and will commit no waste upon said premises; and, if the Mortgagor shall neglect so to keep in repair, the Trustee may, at its discretion, enter upon said premises from time to time and repair and keep in repair said buildings and improvements without thereby becoming liable as a Mortgagee in possession, and that the expense of so doing shall be repaid by the Mortgagor on demand, with interest at the rate of 10% per annum, and, until so repaid, shall become and be so much additional indebtedness secured hereby;

6. That the Trustee shall have the right at any time by it deemed necessary to incur expense in procuring and/or continuing an abstract of title to said premises, or other showing of the title, and any expense so incurred shall be repaid by the Mortgagor, with interest at the rate of 10% per annum, and, until so repaid, shall be so much additional indebtedness secured hereby;

7. That if the Mortgagor shall make default in the payment of any of the aforesaid taxes, assessments, rates, charges, mortgages, and liens, or in procuring and maintaining insurance as above covenanted, the Trustee, or any payee of the indebtedness secured hereby, at its option, may pay such taxes, assessments, rates, charges, mortgages or liens, and effect and maintain such insurance, and the sum or sums so paid shall be repaid by the Mortgagor to the Trustee or payee on demand, and, until so repaid, shall bear interest at the rate of 10% per annum and shall be a further lien on the aforesaid property and premises as so much additional indebtedness secured by this indenture;

8. That, in case of the breach or default in the performance by the Mortgagor of any covenant herein contained, all of the indebtedness secured by this instrument, whether the same shall be due and payable according to the tenor and effect of any promissory note secured hereby or not, and anything herein to the contrary notwithstanding, shall, at the option of the Trustee, or of the payee of the indebtedness secured hereby, immediately become and be due and payable without notice to the Mortgagor of such option or election; PROVIDED, that if the indebtedness secured be evidenced by more than one promissory note, such election may be made either by the Trustee or by the payee or payees of at least fifty per cent of such indebtedness;

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Boginning for a tie at a point in Bernalillo County, State of New Mexico, on the South boundary of the Town of Alameda Grant, which is on the section line common to Section 13, T. 11 N., R. 2 E., and Section 18, T. 11 N., R. 3 E., N.M.P.M., thence N 22 deg. 00'52" E., 6361.38 feet to the Southeast corner of the tract herein described; thence N 57 deg. 55'28" W., 730.00 feet; thence N 73 deg. 28'49" W., 400.00 feet; thence N 53 deg. 08'51" W., 480.00 feet to the Southwest corner of this tract; thence N 36 deg. 51'09" E., 277.79 feet to the Northwest corner of this tract; thence S 57 deg. 11'00" E., 388.87 feet; thence N 89 deg. 49'00" E., 338.45 feet; thence S 60 deg. 32'30" E., 555.45 feet; thence S 36 deg. 44'30" E., 122.50 feet; thence S 19 deg. 31'30" E., 371.21 feet to the Northeast corner of this tract; thence S 66 deg. 56'23" W., 165.34 feet to the point of beginning containing 12.870 acres, more or less. And more particularly described as follows:

Tract "S" as the same is shown and designated on Corrected Land Division Map of a portion of Paradise Hills Development Area, Bernalillo County, New Mexico, said Corrected Land Division Map having been filed in the Records of Bernalillo County on September 5, 1973, Volume D-5, Folio 178.

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as described above

and that the Mortgagor shall and will forever warrant and defend the same to the Trustee and its successors in trust against the lawful claims and demands of all persons, except as in this paragraph stated;

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3. That the Mortgagor will pay promptly when due all indebtedness, principal and interest, secured by any and all prior and superior mortgages, if any, and all taxes and assessments, rent, and charges, and all laborers', mechanics' or materialmen's or other liens of every nature and nature which shall be levied or imposed upon said real estate, or upon or on account of this indenture, or the indebtedness secured hereby, or upon the interest or estate in said property represented by this mortgage, whether levied or assessed or imposed against the Mortgagor, or otherwise;

4. That the Mortgagor will keep all destructible property described herein, or situated upon the lands described herein, insured against loss and damage by fire and such other risks and hazards as the Trustee may from time to time specify, all in responsible insurance companies approved by the Trustee, in an amount not less than the amount of the indebtedness secured hereby, with loss payable by any insurer to the Trustee as its interest created hereby may appear, and will pay promptly the premiums therefor, and will deliver said policies, as soon as issued, to the Trustee;

5. That the Mortgagor will keep all buildings and improvements on said premises in good and substantial repair, and will make no alterations therein (except to keep them in good repair) without the written consent of the Trustee, and will commit no waste upon said premises; and, if the Mortgagor shall neglect so to keep in repair, the Trustee may, at its discretion, enter upon said premises from time to time and repair and keep in repair said buildings and improvements without thereby becoming liable as a Mortgagee in possession, and that the expense of so doing shall be repaid by the Mortgagor on demand, with interest at the rate of 10% per annum, and, until so repaid, shall become and be so much additional indebtedness secured hereby;

6. That the Trustee shall have the right at any time by it deemed necessary to incur expense in procuring and/or continuing an abstract of title to said premises, or other showing of the title, and any expense so incurred shall be repaid by the Mortgagor, with interest at the rate of 10% per annum, and, until so repaid, shall be so much additional indebtedness secured hereby;

7. That if the Mortgagor shall make default in the payment of any of the aforesaid taxes, assessments, rates, charges, mortgages, and liens, or in procuring and maintaining insurance as above covenanted, the Trustee, or any payee of the indebtedness secured hereby, at its option, may pay such taxes, assessments, rates, charges, mortgages or liens, and effect and maintain such insurance, and the sum or sums so paid shall be repaid by the Mortgagor to the Trustee or payee on demand, and, until so repaid, shall bear interest at the rate of 10% per annum and shall be a further lien on the aforesaid property and premises as so much additional indebtedness secured by this indenture;

8. That, in case of the breach or default in the performance by the Mortgagor of any covenant herein contained, all of the indebtedness secured by this instrument, whether the same shall be due and payable according to the tenor and effect of any promissory note secured hereby or not, and anything herein to the contrary notwithstanding, shall, at the option of the Trustee, or of the payee of the indebtedness secured hereby, immediately become and be due and payable without notice to the Mortgagor of such option or election; PROVIDED, that if the indebtedness secured be evidenced by more than one promissory note, such election may be made either by the Trustee or by the payee or payees of at least fifty per cent of such indebtedness;

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

HORIZON CORPORATION

for consideration paid, grant

to STERLING CORPORATION

the following described real estate in Bernalillo County, New Mexico:

Tract "B" as the same is shown and designated on Corrected Land Division Map of a portion of Paradise Hills Development Area, Bernalillo County, New Mexico, said Corrected Land Division Map having been filed in the Records of Bernalillo County on September 5, 1973, Volume D-5, Folio 178.

SUBJECT TO: The terms, provisions, conditions, restrictions, stipulations, and the charges and assessments imposed thereunder of that certain Water System Agreement dated January 14, 1961, recorded September 20, 1961, in Book Misc. 35, Page 559, records of Bernalillo County, New Mexico, and of that certain Sewer System Agreement dated January 14, 1961, recorded September 20, 1961, in Book Misc. 35, Page 527, records of Bernalillo County, New Mexico.

SUBJECT TO: Reservations, restrictions and easements of record. Taxes for the current and subsequent years.

SUBJECT TO: Reservation of one-half of all oil, gas, uranium and other minerals as reserved in Warranty Deed recorded in Book D 513, Page 189, records of Bernalillo County, New Mexico.

with warranty covenants.

WITNESS ... hand ... and seal ... this 10 day of October, A.D. 73

(Seal) HORIZON CORPORATION (Seal)

(Seal) By: [signature] Vice President (Seal)

ACKNOWLEDGMENT FOR NATURAL PERSONS

STATE OF NEW MEXICO)
) ss.
COUNTY OF ...)

The foregoing instrument was acknowledged before me this ... day of ..., 19...

by ...
(Name or Names of Person or Persons Acknowledged)

My commission expires:
(Seal)

Notary Public

ACKNOWLEDGMENT FOR CORPORATION

STATE OF NEW MEXICO ARIZONA)
) ss.
COUNTY OF BERNALILLO PIMA)

The foregoing instrument was acknowledged before me this 18 day of October, A.D. 73,

by R. E. Gentry, Vice President
(Name of Officer)

of HORIZON CORPORATION
(Name of Corporation Acknowledged)

a Delaware corporation, on behalf of said corporation.
(State of Incorporation)

My commission expires: (Seal) Feb. 1, 1975

Helen M. V. Hatchel
Notary Public

FOR RECORDER'S USE ONLY

State of New Mexico }
County of Bernalillo } ss
This instrument was filed for record

OCT 19 1973

at 2:47 o'clock P.M. Recorded in Book ... Page ... of records of said County

Clerk & Recorder

Deputy Clerk

All that
Gallego
particu

BEGINNI
and 36,
the rig
South 8
line co
right o
ing sai
1480.76
Bouleva
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N. E. a
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Mateo R
of the

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

RETURN TO:
NEW MEXICO TITLE CO. 363

DEED OF TRUST—FORM 1960 REV. 10-69

This Indenture made this 10th day of October 19 73, by and between SPRINGER CORPORATION 78656

(hereinafter, whether singular or plural, or masculine, feminine or neuter, called "Mortgagor", and sometimes referred to by the singular neuter pronoun) and ALBUQUERQUE NATIONAL BANK

(hereinafter, whether singular or plural, or masculine, feminine or neuter, called "Trustee", and sometimes referred to by the singular neuter pronoun), WITNESSETH:

WHEREAS, the Mortgagor is indebted to

HORIZON CORPORATION and as evidence thereof has made, executed, and delivered to said

HORIZON CORPORATION

certain note of even date herewith, described as follows, to-wit:

[redacted]

For value received, the undersigned, jointly and severally, hereby waive presentment for payment, notice of dishonor, protest and all notices and demands of every kind in connection with the delivery, acceptance, performance, default or enforcement of the payment of this note, and agree that the holder may at any time and from time to time without notice to the undersigned and without affecting the liability of the undersigned extend the time for payment of this note or any installment thereof, release any party liable hereon, accept partial payment of this note, release, substitute or add any collateral securing payment of this note, all without affecting the liability of the undersigned hereunder. The undersigned hereby waive the benefit of any statute of limitations affecting the liability of the undersigned hereunder or the enforcement hereof, and agree that any action against the undersigned may be brought in any court of competent jurisdiction in the State of New Mexico, as selected by the holder hereof.

OTHER PROVISIONS NOTWITHSTANDING Horizon Corporation agrees that Springer Corporation shall have the option within 120 days from the date hereof to rescind this Deed of Trust, without penalty and to have the property reconveyed if Springer Corporation is unable to obtain M-1 or S-U zoning within that period.

payable at as described in the Note

with interest at the rate of per cent (%) per annum from date until paid, interest payable

In case of default in the payment of any of said installments, when the same shall fall due, such installments shall bear interest from the date of their respective maturities until paid at the rate of per cent (%) per annum; and if any one of said installments or any interest due thereon is not paid within ten days after the same becomes due and payable, the whole of the principal sum then remaining unpaid, together with the interest that shall have accrued thereon, shall forthwith become due and payable without notice or demand at the option of the holder of the said note , with ten percent additional on amount unpaid should the said note be placed in the hands of an attorney for collection.

WHEREAS, the Mortgagor desires to secure the payment of said indebtedness;

NOW, THEREFORE, in consideration of the premises and of the sum of One Dollar ($1.00) to it in hand paid, the receipt whereof is hereby acknowledged, the Mortgagor has granted, bargained, sold, and conveyed, and does hereby grant, bargain, sell, and convey, unto the Trustee, and its successors in trust, the following real estate, situate, lying, and being in the County of Bernalillo, State of New Mexico, to-wit:

B. H. SWINBURNE, CHAIRMAN
WILLIAM V. HEREFORD, VICE-CHAIRMAN
FRANCES McCOY, SECRETARY-TREASURER
R. WARD HUNNICUTT, DIRECTOR
REX FUNK, DIRECTOR

RICHARD E. LEONARD
EXECUTIVE ENGINEER

Albuquerque
Metropolitan
Arroyo
Flood
Control
Authority

P. O. BOX 25851 - ALBUQUERQUE, N. M. 87125
TELEPHONE 884-2215

B13/D1

RECEIVED
JAN 10 1986
DH 600
HYDROLOGY SECTION

8 January 1986

Billy Goolsby
MDD/Engineering
123 Central, N.W.
Albuquerque, New Mexico

SUBJECT: Irving Business Park

Dear Billy:

I have inspected the pipe rundown into the Calabacillas Arroyo as required in Phase I of the project.

The work is approved as meeting AMAFCA requirements.

Sincerely,

Dan Sabo

Dan Sabo
Drainage Engineer

DS/kkm

cc: Bill McLean - Denney, Tibljas, McLean & Associates
Larry Blair - AMAFCA



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IRVING BUSINESS PARK
DRAINAGE REPORT

APRIL 1985
REVISED JUNE, 1985

This Report Prepared For:

SOUTHWEST INVESTMENT REALTY
2727 San Pedro Drive NE
Albuquerque, NM 87110

DGA JOB NO. 802.12

I, Kent S. Freier, a Registered Professional Engineer in the State of New Mexico do hereby certify that the enclosed documents and drawings were prepared under my supervision and are true and correct to the best of my knowledge and belief.

KENT S. FREIER
N.M.P.E. No. 8182

IRVING BUSINESS PARK
DRAINAGE REPORT
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DRAINAGE INFORMATION SHEET

PROJECT TITLE: Irving Business Park ZONE ATLAS/DRNG. FILE #: B-13/D1

LEGAL DESCRIPTION: NW 1/4, Section 7, T 11 N, R 2 E,

CITY ADDRESS: Irving Boulevard N.W.

ENGINEERING FIRM: Denney-Gross & Associates, Inc. CONTACT: Kent Freier

ADDRESS: 2400 Comanche Road N.E. PHONE: 884-0696

OWNER: Southwest Investment Realty CONTACT: Mike Castillo

ADDRESS: 2727 San Pedro Drive N.E. PHONE: 883-3070

ARCHITECT: Claudio Vigil Architects & Planners CONTACT: Warren Shaw

ADDRESS: 2340 Alamo Avenue S.E. PHONE: 247-1000

SURVEYOR: Denney-Gross & Associates, Inc. CONTACT: Steve Youtsey

ADDRESS: 2400 Comanche Road N.E. PHONE: 884-0696

CONTRACTOR: Jaynes Corporation CONTACT: Don Power

ADDRESS: 2906 Broadway NE PHONE: 345-8591

PRE-DESIGN MEETING:

____ YES
X NO
____ COPY OF CONFERENCE RECAP SHEET PROVIDED

RECEIVED
JUN 18 1985
HYDROLOGY SECTION

DRB No. -----
EPC No. -----
PROJ. No. Non-Work Order

TYPE OF SUBMITTAL:

X DRAINAGE REPORT
____ DRAINAGE PLAN
____ CONCEPTUAL GRADING & DRAINAGE PLAN
____ GRADING PLAN
____ EROSION CONTROL PLAN
____ ENGINEER'S CERTIFICATION

NOTE: Claudio Vigil is Architect for Phase I.
Gordon Hall is Architect for Phase II.
No Architect for Phase III.

DATE SUBMITTED: June 17, 1985

BY: KENT FREIER

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)

IRVING BUSINESS PARK
DRAINAGE REPORT

INTRODUCTION

The Irving Business Park (hereafter referred to as the Park), formerly known as the "Springer Tract", is a 10.5592 acre development located in the Paradise Hills area within the Albuquerque City Limits. More specifically, the tract lies within Section 7, T 11 N, R 2 E, and can be found in the City of Albuquerque Zone Atlas on Page B-13. Please refer to Figure 1 of Appendix B. The Flood Insurance Rate Map and Floodway and Flood Boundary Map, Panel 2 of 50, reflect flood plain information of this area. A copy of the FIRM Map and the FWFBM Map are shown in Figures 2 and 2A of Appendix B. The currently filed plat for the Tract can be found in Volume D9, Folio 47, at the Bernalillo County Clerk's Office.

SITE FEATURES

The Park consists of a tract of land comprising 10.5592 acres which lies between Irving Boulevard and the Calabacillas Arroyo. The northern boundary of the Park is also the Albuquerque City Limits and the southern boundary of the Arroyo. There is a narrow tract of land situated between Irving Boulevard and the Park. Generally the land slopes from south to north. The general topography of the area can be found in Figure 3 of Appendix B. The Park lies approximately 40 feet in elevation below Irving Boulevard. Almost all of the elevation drop is obtained in the 200-foot strip of land between Irving Boulevard and the Park. The Park itself slopes from the northwest to the southeast on a 2% grade.

Irving Boulevard consists of a 106-foot wide right-of-way with a 26-foot wide, recently paved, section in the northern half. This will allow for a future additional second lane to be constructed. The paved section contains an asphalt median curb on the south and a concrete barrier curb and gutter on the north. The entire typical section is shown in Figure 4 of Appendix B.

Current orthophoto maps available at the City of Albuquerque, dated 1973, do not reflect the recent construction of Irving Boulevard which significantly changed the topography of the area. Therefore, the site was flown again to obtain accurate topographic information. Some of the figures used in this report such as Figure 3 of Appendix B use the old topographic maps for general graphic use, but actual construction drawings use the updated topography.

Figures 2 and 2A of Appendix B shows the flood plain information for the Park. The northern boundary of the Park actually lies within the Arroyo in places, but development will not encroach on the flood plain. Simons, Li and Associates conducted a study in 1983 to determine the probable limits of erosion of the banks of the Calabacillas Arroyo. A boundary known as the "Simons and Li Line", was computed to show where development along the arroyo should stop. This line is shown in the construction drawings and in the plat. No buildings or parking areas will be constructed inside the Simons and Li Line. Developers may try to landscape this area in the future but no activity in this zone is expected at this time.

The parcel of land between the Park and Irving Boulevard is known as Tract BB of Eagle Ranch. The plat showing this area is found in Volume C24, Folio 114, at the Bernalillo County Courthouse. The apparent owner of this land is Bellamah Community Development, but Tract BB was dedicated as a drainage and access easement to AMAFCA. Currently the property is not in a developable condition and might not ever be since there is an elevation drop of 40 feet across the 200-foot width. However, fill dirt is needed for the Park and negotiations are currently underway to excavate material from Tract BB to use as fill at the Park. Excavation will be done in such a manner as to leave Tract BB suitable for its original intended use.

The Park and adjacent properties are in a natural, undeveloped state. The June 1977 Bernalillo County Soil Survey shows all of the soils to be Type BCC, which is Bluepoint Loamy Fine Sand, with 1 to 9 percent slopes extending for a 20-foot depth. This soil is nonplastic and is in the Hydrologic Soil Group A. Permeability is 6 - 20 inches per hour.

HYDROLOGY

Plate 22.2 D-1 of the Albuquerque Development Process Manual shows the following rainfall depth values which should be used:

100-year/6-hour	2.20 inches
50-year/6-hour	2.02 inches
10-year/6-hour	1.45 inches
5-year/6-hour	1.19 inches
2-year/6-hour	0.98 inches

There are some offsite areas which contribute runoff onto the Park. Most of these areas, however, were diverted with the construction of Irving Boulevard. The areas to the south of Irving Boulevard drain to the paved street. The paved portion of Irving Boulevard slopes to direct runoff to the east. There is a significant arroyo on the south side of Irving Boulevard which is indicated on Figure 3 of Appendix B. This arroyo crosses Irving Boulevard in a culvert east of the Park. There is a transverse drop inlet across Irving Boulevard at this location to divert flows from the street to the arroyo. From this point, this arroyo flows to the Calabacillas Arroyo.

The areas which contribute runoff will be the 10 acre Park itself and the area between the Park and Irving Boulevard. This area is shown in Figure 3 of Appendix B. Since the total of the study area is much less than 400 acres, the Rational Method will be used to compute rates of runoff. In the curent state, runoff flows to the Calabacillas Arroyo in an uncontrolled manner. There are no definitive discharge points along the Calabacillas Arroyo. A sheet flow situation exists as the ground now sets. As stated before, the topo shown in Figure 3 is no longer completely accurate. However, the drainage boundaries shown in Figure 3 were determined using the recently developed topo maps. The drainage boundaries are shown on Figure 3 for convenience of scale.

Plate 22.2 D-1 of the DPM shows that a C Factor of 0.18 should be used for Class A soils with a minimum impervious area. The area is totally undeveloped but there are some hard packed dirt roads, thus calling for a C of 0.20 rather than 0.18. The time of concentration was computed (See Appendix A) and found to be 10 minutes. Peak flow rates for the Park area are as follows:

TABLE I

UNDEVELOPED FLOW RATES FOR PARK ONLY

Event	Rainfall Intensity I Inches	I iph	C Factor	Area A Acres	Flow Rate Q cfs
100 yr	2.20	4.65	0.20	10.5592	9.82
50 yr	2.02	4.27	0.20	10.5592	9.02
10 yr	1.45	3.06	0.20	10.5592	6.47
5 yr	1.19	2.52	0.20	10.5592	5.31
2 yr	0.98	2.07	0.20	10.5592	4.37

There are approximately 13.71 acres of undeveloped land which contributes runoff to the park area. Some of these areas will be graded to allow the Park to develop. These offsite areas are owned by others but agreements will be reached with these land owners concerning the grading and maintenance of the slopes. The Park will be graded and drained such that the offsite area flows will be accommodated as long as they are undeveloped. If the offsite areas are

developed, they must include their own drainage system which will prohibit any increase in flow rates or durations entering the Park. Offsite flows were computed as follows:

TABLE II

UNDEVELOPED FLOWS FOR OFFSITE AREAS

Event	Rainfall I Inches	Intensity I iph	C Factor	Area A Acres	Flow Rate Q cfs
100 yr	2.20	4.65	0.20	13.71	12.75
50 yr	2.02	4.27	0.20	13.71	11.71
10 yr	1.45	3.06	0.20	13.71	8.40
5 yr	1.19	2.52	0.20	13.71	6.90
2 yr	0.98	2.07	0.20	13.71	5.68

Flood plain information concerning the Calabacillas Arroyo was obtained from the Floodway and Flood Boundary Maps (FWFBM) (Figure 2A of Appendix B). Also, there is a bound report titled "Flood Insurance Study, City of Albuquerque, New Mexico, Bernalillo County." This 8½ by 11 bound report gives backup documentation on the methodology used in preparing the maps. Included in this report are flow profiles for the Calabacillas Arroyo. Cross sections in the FWFBM can be cross referenced to the report to get water surface elevations. For the park this information can be found in Table III.

TABLE III

FLOOD PLAIN INFORMATION

Cross Section	500 year WSEL	500 year Q	100 year WSEL	100 year Q	10 year WSEL	10 year Q
K	5077.0	-	5072.0	-	5069.9	-
L	5084.2	-	5078.5	-	5073.7	-
M	5089.4	-	5085.6	-	5081.3	-
N	5098.0	26,200	5093.2	11,900	5089.5	2,460

DEVELOPED CONDITION

The planned development for the Irving Business Park calls for the construction of four large buildings and an access road from Irving Boulevard into the Park and along the south boundary almost all the way to the eastern boundary. Figure 3 of appendix B shows the basic layout of the buildings. The building pads are numbered 1 - 4 for referencing.

Development will proceed in three basic phases. Phase I involves the construction of the roadway and Building Number One and related parking. This building will be a gymnasium. The building is currently being designed. Phase II consists of constructing Building Number Four and its required parking area. This building will be a general spa type of recreational facility housing basketball courts, raquetball courts, lockers, a weight room, etc. An architect has been hired for the design of this building but it is still very preliminary.

Phase III will complete the Park with construction of Buildings Two and Three. These buildings will probably consist of office space, but this phase of work will not begin in the near future.

In the fully developed condition, flows will be divided into two basic patterns. Since Phase I of construction must "stand alone", this area will require its own collection point and discharge to the Calabacillas Arroyo. Flows from offsite will enter the parking lot in an uncontrolled manner and will then be routed around the building to a catch basin in the northeast corner. A double "Type D" City of Albuquerque Catch Basin will be installed. A 15" outlet pipe will run from this point to the arroyo. The pipe is rather steep near the catch basin but flattens out just prior to exiting into the arroyo. This will cause a hydraulic jump to form inside the pipe and the discharge point will be of reduced velocity. Riprap will be placed at the pipe outlet to further prevent erosion.

The remaining three buildings will utilize a single drainage system to reduce the number of structures discharging to the arroyo. Basically, these areas will sheet flow across the parking lot to the north end of the tract where a vee shape channel will convey flows to a drop chute structure in the arroyo. The channel is actually the drive access on the north side of the parking area.

The drop chute will be constructed with the Phase II building so that the area will have a discharge. When the center two buildings are constructed, the channel/drive on the north side will be extended providing a drainage system to convey flow to the drop chute.

Offsite flows will enter the Park Road on the south side in an uncontrolled manner. This long cul-de-sac is to be a private drive and will not be dedicated to the City. There are 2 low points designed into this road. One point is the western drive entrance. At this point a cross slope was put on the street to get flow from the street to the parking area, to the north channel/drive and eventually to the drop chute. A second low point is near Building No. 4. At this point another catch basin will be installed to drop the runoff from the roadway to the parking lot; across the lot to the drop chute. A summary of developed condition hydrology is shown in Table IV. Both areas include both offsite and onsite areas.

TABLE IV

DEVELOPED CONDITION FLOW RATES

Area	A Acres	C	Sum. CA	I, iph		Q, cfs	
				10	100	10	100
1	1.92	.90					
	0.47	.30	1.87	3.06	4.65	5.7	8.7
2	7.16	.90					
	10.50	.30	9.59	2.84	4.31	27.2	41.3

Drainage facilities which will convey runoff from the Park to the Calabacillas Arroyo will be designed for the 100-year flows. The peak rates of flow will not be reduced by detention ponding. The total undeveloped peak discharge from the area is 22.6 cfs. The sum of the developed condition discharges is 50.0 cfs. This increase of 27.4 cfs added to the flow already in the Calabacillas Arroyo (11,900 CFS) is insignificant. It does not appear that adverse downstream conditions will occur.

PHASED CONSTRUCTION

As previously mentioned, the Park is to be constructed in three phases. Phase I involves the construction of Building Number One and the entrance road. The building and parking lot will be drained to a catch basin and discharge pipe. The roadway has two low points which discharge to the parking lots of future phases. Temporary measures will be needed to prevent serious erosion at these areas.

The road will be constructed in the final form, i.e. with asphalt curb and gutter. The north side of the roadway will be sloped on a 3H to 1V grade to connect to existing ground. The two discharge points will rquire ponding areas as a temporary measure. Ponds will be sized to contain the 10 year runoff. This runoff will be pimarily from the offsite areas south of the tract but runoff from the paved roadway will be included.

TABLE V

TEMPORARY POND SIZING

Area	Area, ac.	C	Q, CFS	Volume, ac ft.	
2A	8.94	.30	8.20	0.32	
Roadway	0.59	.90	1.62	0.06	Sum = 0.38 ac. ft.
2B	1.56	.30	1.43	0.06	
Roadway	0.48	.90	1.32	0.05	Sum = 0.11 ac. ft.

The ponds will be removed during future construction phases.

Phase II construction will include the concrete chute rundown. Phase III will tie into the Phase II system by grading the parking areas to flow north to the access road along the north boundary. The access road will be graded to direct flows to the rundown.

APPENDIX A

COMPUTATIONS

DENNEY - GROSS & ASSOCIATES, INC.
ENGINEERS SURVEYORS PLANNERS
2400 COMANCHE ROAD N.E.
ALBUQUERQUE, NEW MEXICO 87107
(505) 884-0695

LOCATION Irving Business Park
PROJ. NO. 602.12
DATE 4/11/85
DESIGNER KF
PAGE A-1

General Information

Rainfall depths - Plate 22.2 D-1

100 yr	6 hr	2.20 inches
50 yr	6 hr	2.02
10 yr	6 hr	1.45
5 yr	6 hr	1.19
2 yr	6 hr	0.98

Undeveloped C Factor = 0.25 Plate 22.2 C-1

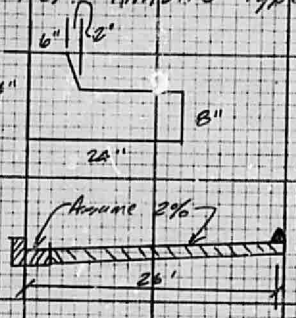
Soil = BCA Blowpoint sandy loam Group A

Flood Flow in Colobocillos =

Existing Pavement on Irving Blvd

Conc. Curb & Gutter north Asphalt Curb South

Conc. C&G AASHO Type "B"



DENNEY - GROSS & ASSOCIATES, INC.
ENGINEERS SURVEYORS PLANNERS
2400 COMANCHE ROAD N.E.
ALBUQUERQUE, NEW MEXICO 87107
(505) 884-0695

LOCATION Undeveloped Condition
PROJ. NO. 802.12
DATE 9/15/85
DESIGNER KSF
PAGE A-2

Undeveloped Area

Time of Concentration - Park only

Flow from NW to SE

L = 1650'

ΔE1 = 5120 - 5066 = 54' (Orthophoto)
5120 - 5080 = 40' (New Topo)

S = 54/1650 = 0.0327 Ft/Ft (orthophoto)
= 40/1650 = 0.0242 Ft/Ft (new Topo)

$Tc = 0.0078 (1650)^{.77} / (0.0327)^{.385}$ = 8.7 min
$0.0078 (1650)^{.77} / (0.0242)^{.385}$ = 9.8 min

Tc = 10 min

C Factor

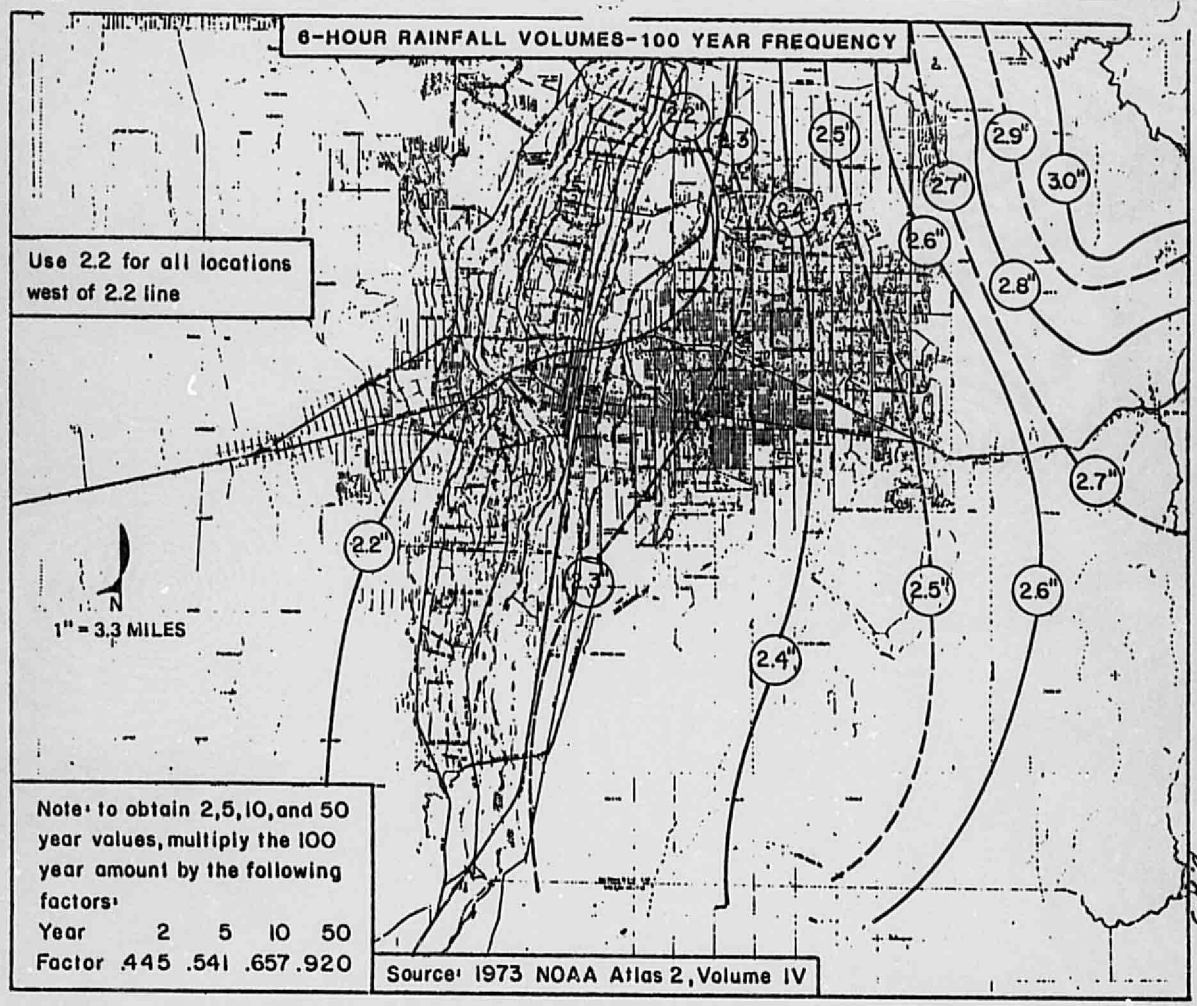
Plate 32.2 C = 1
Class A 0% imp = 0.18
Use 0.20 since some roads are hard packed dirt.

DENNEY - GROSS & ASSOCIATES, INC.
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LOCATION Undeveloped Condition
PROJ. NO. 80212
DATE 4/15/85
DESIGNER KF
PAGE A-28

Offsite Areas
A= 13.71 Ac.
L= 800'
ΔEl= 6180 − 5110 = 70'
S= 70/800 = 0.0875
$T_c = 0.0078 (800)^{.77} / (.0875)^{.385} = 34$ min
Use 10 minutes

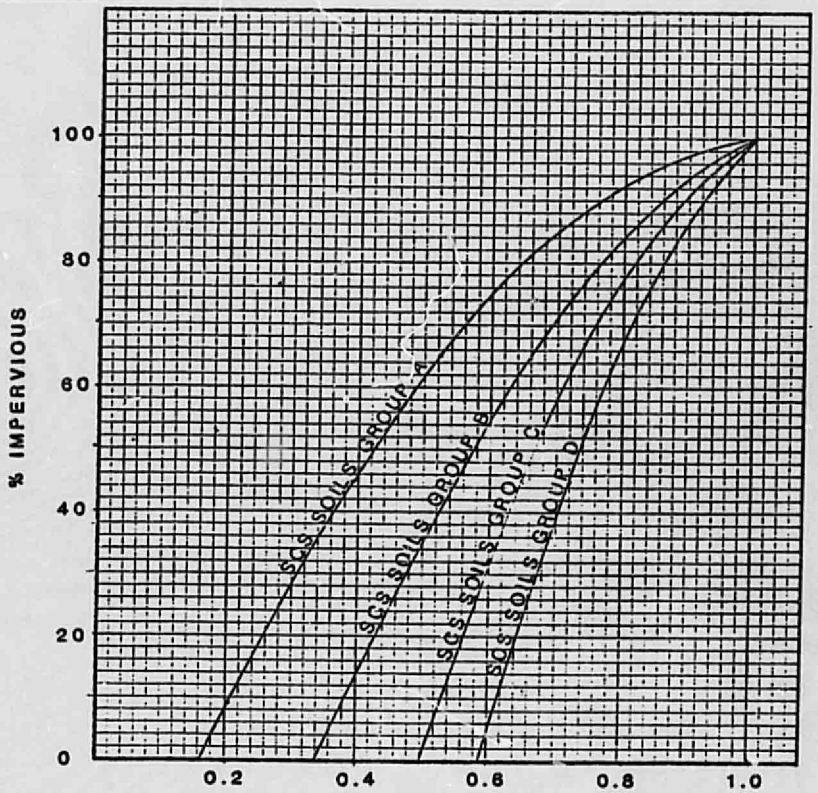
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.



P.A-4

DRAINAGE CRITERIA

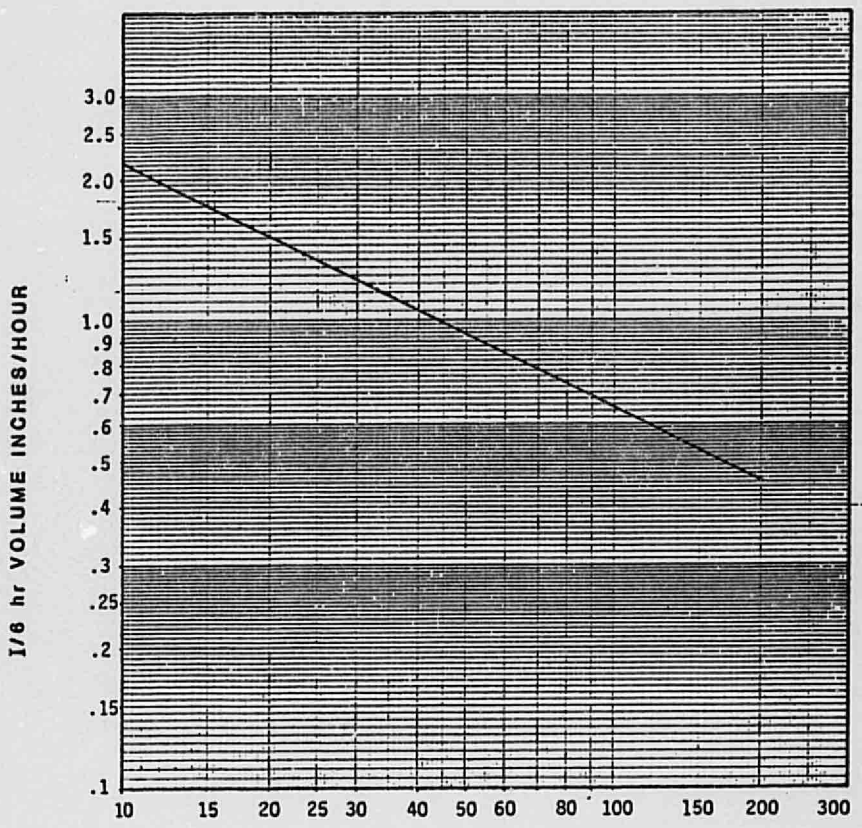
DETERMINATION OF RATIONAL FORMULA 'C' FACTOR



DIMENSIONLESS RAINFALL INTENSITIES

PA-5

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



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.

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LOCATION Area within Simms & Li Line
PROJ. NO. 802.12
DATE 9/18/85
DESIGNER KSF
PAGE A-7

N1=10,000.0000
E1=10,000.0000

N 57.4017 W
HD=706.0200

N2=10,374.3528
E2=9,408.4867

N 73.1425 W
HD=399.4600

N3=10,489.5405
E3=9,025.9948

N 52.5457 W
HD=479.4700

N4=10,778.6550
E4=8,643.4973

N 35.5034 E
HD=142.0000

N5=10,893.7640
E5=8,726.6472

S 65.0012 E
HD=501.5000

N6=10,681.8474
E6=9,181.1729

S 85.3605 E
HD=273.9000

N7=10,660.8407
E7=9,454.2662

S 64.8412 E
HD=565.0500

N8=10,413.7597
E8=9,962.4320

S 19.3410 E
HD=396.7500

N9=10,039.9275
E9=10,095.3231

ΣHD=3,458.1500
AREA=391,851.0771
CLOSURE
S 67.1622 W
HD=103.3474

N10=10,000.0000
E10=10,000.0000

S 67.1622 W
HD=103.3474

N11=10,000.0000
E11=10,000.0000

ΣHD=3,561.4974
AREA=393,754.0822
AREA=9.0393

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LOCATION Area of Tract
PROJ. NO. 802.12
DATE 4/18/85
DESIGNER KF
PAGE A-6

N1=10,000.0000
E1=10,000.0000

N 57.4017 W
HD=700.0200

N2=10,374.3528
E2=9,408.4867

N 73.1425 W
HD=399.4600

N3=10,489.5405
E3=9,025.9948

N 52.5457 W
HD=479.4700

N4=10,778.6550
E4=8,643.4973

N 35.5034 E
HD=225.2700

N5=10,961.2649
E5=8,775.4071

S 56.5558 E
HD=388.8900

N6=10,749.0777
E6=9,101.3089

S 89.5511 E
HD=338.6000

N7=10,748.4833
E7=9,439.9086

S 60.1641 E
HD=555.6000

N8=10,473.1416
E8=9,922.4148

S 36.2602 E
HD=122.5400

N9=10,374.5530
E9=9,995.1907

S 19.2513 E
HD=347.7600

N10=10,046.5788
E10=10,110.8191

S 67.1431 W
HD=120.2700

N11=10,000.0535
E11=9,999.9126

ΣHD=3,677.9900
AREA=475,898.2055
CLOSURE
S 58.3349 E
HD=8.1025

N12=10,000.0000
E12=10,000.0000

AREA=10.9251
S 58.3349 E
HD=8.1025

N13=10,000.0000
E13=10,000.0000

ΣHD=3,677.9825
AREA=475,898.2032
AREA=10.9251

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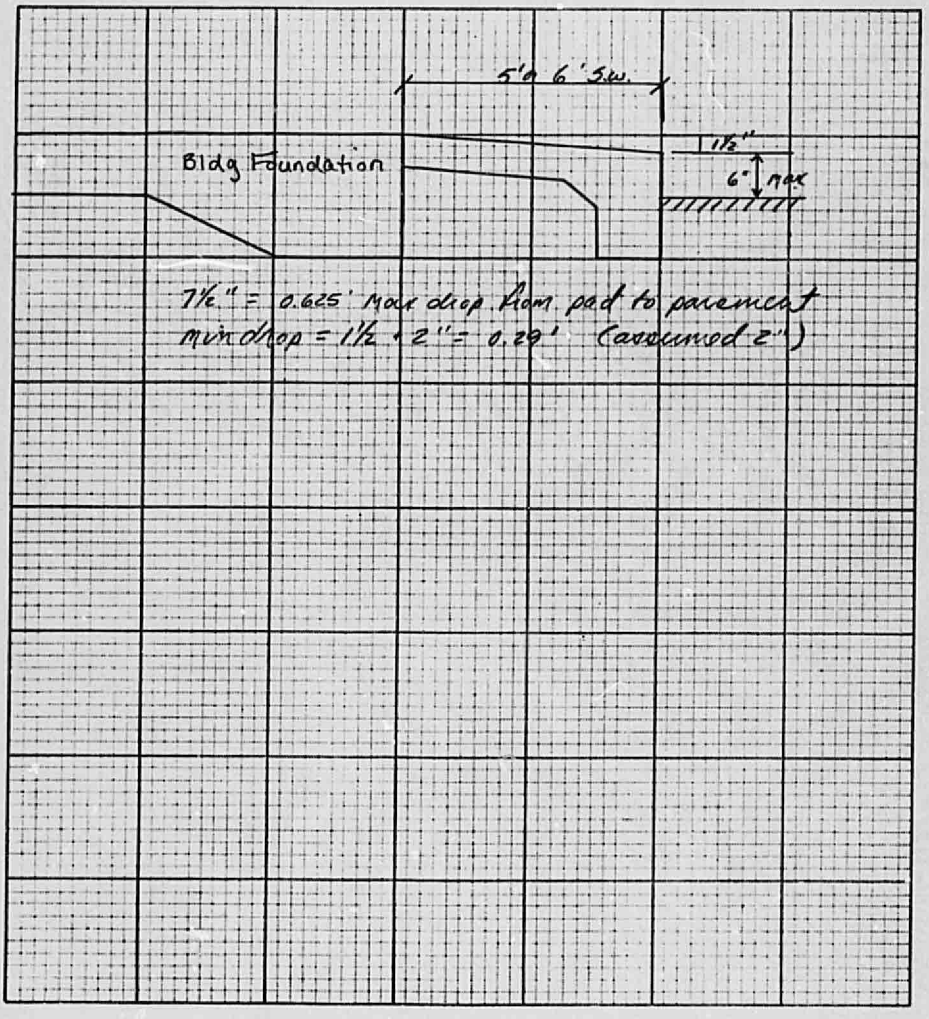
LOCATION Grading Information

PROJ. NO. 8212

DATE 9/18/85

DESIGNER VE

PAGE A-8



1½" = 0.625' max drop from pad to pavement
min drop = 1½ + 2" = 0.29' (assumed 2")

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LOCATION Developed Condition
PROJ. NO. 802.12
DATE 9/18/85
DESIGNER KF
PAGE A-9

Area's	Park	Offsite	Corrected Offsite
1	1.92	3.67	3.55
2	0.47	0	
3	1.07	0	
4	3.36	8.94	8.65
5	1.41	0	
6	0.83	1.56	1.51
	9.08	14.17	

Offsite area = 13.71
Park = 10.55 92
Park inside Simms Li Line = 9.04
Adjust offsite by 13.71/14.17 = .9675

Time of concentration

Area 1

Split offsite & develop.

Offsite
ΔEl = 5172 - 5112 = 60
L = 700
S = .0857
Tc = 3.12 Min.

Devel. ΔEl = 5112 - 5105 = 7'
L = 460
S = .0146
Tc = 4.61

Total Tc = 7.73 use 10 min

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LOCATION Developed Condition
PROJ. NO. 802.12
DATE 9/18/85
DESIGNER KSF
PAGE A-10

Area 2
ΔE1 = 5106 - 5104 = 2
L = 130
S = .0154
Tc = 1.65 use 10 min

Area 3
ΔE1 = 5105 - 5103 = 2'
L = 100
S = 0.0200
Tc = 1.22 use 10 min

Area 4
Offsite
ΔE1 = 5145 - 5103 = 42'
L = 200
S = 0.21
Tc = 1 min use

Developed
ΔE1 = 5105 - 5099 = 6'
L = 750
S = 0.0080
Tc = 8.2 use 10 min

Area 5
ΔE1 = 101 - 99 = 2'
L = 320
S = 0.0063
Tc = 4.67 use 10 min

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LOCATION Developed Condition
PROJ. NO. E0212
DATE 4/18/85
DESIGNER KF
PAGE A-11

Area 6
Offsite
$\Delta El =$
$L =$
$S =$
$Tc =$

Developed
$\Delta El =$ 5115 - 5096 = 19'
$L =$ 590
$S =$
$Tc =$ 3.59 min Use 10

Q 100

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LOCATION Developed Condition
PROJ. NO. E02.17
DATE 6/17/85
DESIGNER KF
PAGE A-12

Area	A acres	C	ΣCA	I, in/hr 10	I, in/hr 100	Q, cfs 10	Q, cfs 100
1	1.92	.90					
	0.47	.30	1.87	3.06	4.65	5.72	8.69
2	0.97	.90	0.92	3.06	4.65	1.29	1.97
3	1.09	.90	0.98	3.06	4.65	3.00	4.56
4	3.36	.90					
	8.94	.30	5.71	3.06	4.65	17.5	26.5
5	1.91	.90	1.27	3.06	4.65	3.9	5.9
6	0.83	.90					
	1.56	.30	1.22	3.06	4.65	3.7	5.5
						35.11	53.12

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LOCATION Inlets
PROJ. NO. 83.17
DATE 4/22/85
DESIGNER KSE
PAGE A-13

Inlet Design

Use City of Albuquerque Type "D" Catch Basin

Area of opening

Area = 60(7.03125) + 12(6.96875) + 20(6.640625) + 4(6.109375) = 656.7559 in = 4.56 sq ft

Gutter

Area = (10)(25) - 13(30)(0.5) - (2)(25)(0.5) - 7(24)(0.5) + 0.5(0.5)(77) = 666.7555 in

Perimeter

39(2) + 24(2) = 126 in = 10.50' Single D
39(4) + 24(2) = 204 in = 17.00' Double D

Assuming no clogging		P = 10.50	A = 4.56	Single D
Assuming clogging		P = 5.25	A = 2.28	Single D
		P = 8.5	A = 4.56	

Condition	Basin	P	A
Clear	Single D	10.50	4.56
Clear	Double D	17.00	9.12
Clear	3 D	23.50	13.68
Clogged	Single D	5.25	2.28
Clogged	Double D	8.50	4.56
Clogged	3 D	11.75	

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LOCATION Grating Rating Curves
PROJ. NO. 802.12
DATE 4/23/85
DESIGNER KF
PAGE A-13a

Clogged Single O

H=0.10 FT
Q/P=0.09
Q1=0.58 CFS

H=0.20 FT
Q/P=0.27
Q1=1.41 CFS

H=0.30 FT
Q/P=0.49
Q1=2.59 CFS

H=0.40 FT
Q/P=0.76
Q1=3.98 CFS
Q/A=3.36
Q2=7.67 CFS
Q=3.98 CFS

H=0.50 FT
Q/P=1.06
Q1=5.57 CFS
Q/A=3.76
Q2=8.57 CFS
Q=5.57 CFS

Clogged Double O

H=0.10 FT
Q/P=0.09
Q1=0.81 CFS

H=0.20 FT
Q/P=0.27
Q1=2.20 CFS

H=0.30 FT
Q/P=0.49
Q1=4.19 CFS

H=0.40 FT
Q/P=0.76
Q1=6.45 CFS
Q/A=3.36
Q2=15.33 CFS
Q=6.45 CFS

H=0.50 FT
Q/P=1.06
Q1=9.02 CFS
Q/A=3.76
Q2=17.14 CFS
Q=9.02 CFS

Clear Single O

H=0.10 FT
Q/P=0.09
Q1=1.00 CFS

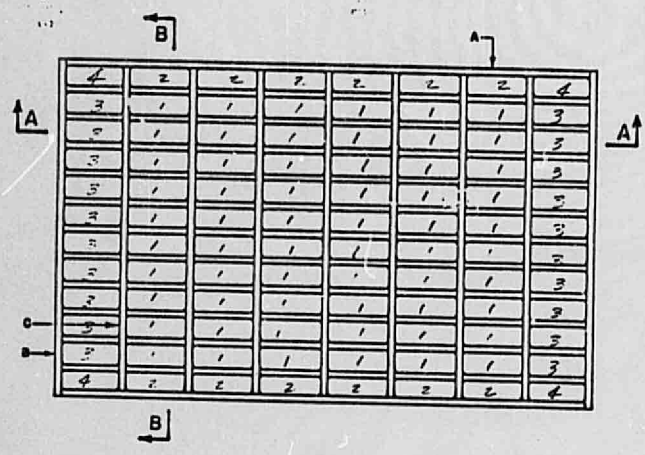
H=0.20 FT
Q/P=0.27
Q1=2.82 CFS

H=0.30 FT
Q/P=0.49
Q1=5.18 CFS

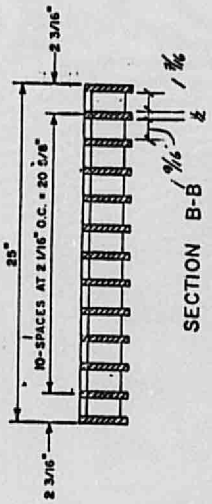
H=0.40 FT
Q/P=0.76
Q1=7.97 CFS
Q/A=3.36
Q2=15.33 CFS
Q=7.97 CFS

H=0.50 FT
Q/P=1.06
Q1=11.14 CFS
Q/A=3.76
Q2=17.14 CFS
Q=11.14 CFS

Area of opening = 4.56 sq. ft.



PLAN



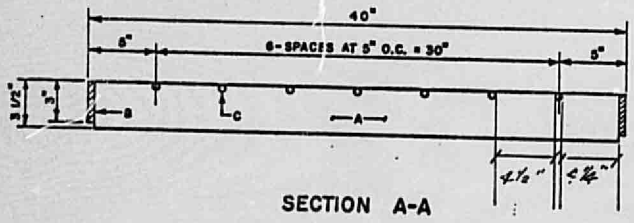
SECTION B-B

GENERAL NOTES:

1. FINISHED DIMENSIONS, 3 1/2" X 25" X 40"
2. ALL BARS SHALL BE STRUCTURAL GRADE STEEL CLASS A36.
3. THE GRATE SHALL BE WELDED WITH 1/8" FILLET WELD AROUND BOTH SIDES OF CROSS BARS, 1/4" FILLET WELD BOTH SIDES OF BEARING BARS.
4. AFTER CLEANING SURFACE OF SCALE, RUST, OILS, ETC., PAINT GRATE WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
5. ANY DAMAGE TO THE PAINTING SHALL BE REPAIRED IN AN APPROVED MANNER.
6. TOP OF CROSS BARS SHALL BE FLUSH WITH TOP OF GRATE.
7. GRIND WELDS FLUSH WITH BEARING BARS.
8. WHEN INSTALLED IN FRAME, PUSH TIGHT TO ONE SIDE, OTHER SIDE SHALL HAVE 5/8" MAX. OPENING. SPACERS WELDED TO FRAME MAY BE USED IF REQUIRED TO KEEP 5/8" SPACE OR LESS. WELD TO FRAME.

CONSTRUCTION NOTES:

A. BEARING BARS, (13) 1/2" X 3 1/2" X 39".
B. END BARS, (2) 1/2" X 3" X 25".
C. CROSS BARS, (7) 1/2" DIA. X 24.



SECTION A-A

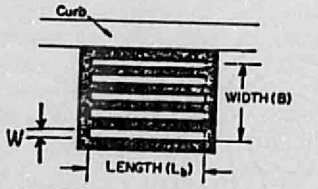
1 = 4 1/2" X 1 3/16" = 7.03125 sq in
2 = 4 1/2" X 1 3/16" = 6.66875 sq in
3 = 4 1/4" X 1 3/16" = 6.640625 sq in
4 = 4 1/4" X 1 3/16" = 6.103375 sq in

1/2 + 7(1/2) + 1/2 + 4 1/4 + 6(4 1/2) + 4 1/4 = 40"

P.A.-A

REVISIONS	CITY OF ALBUQUERQUE
	DRAINAGE STORM INLET ALBUQUERQUE GRATE DWG. K-9 OCT. 19

A-16



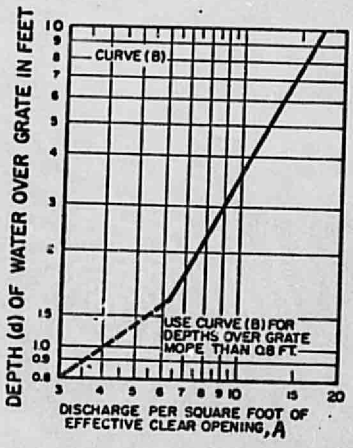
P = 2B + L_b

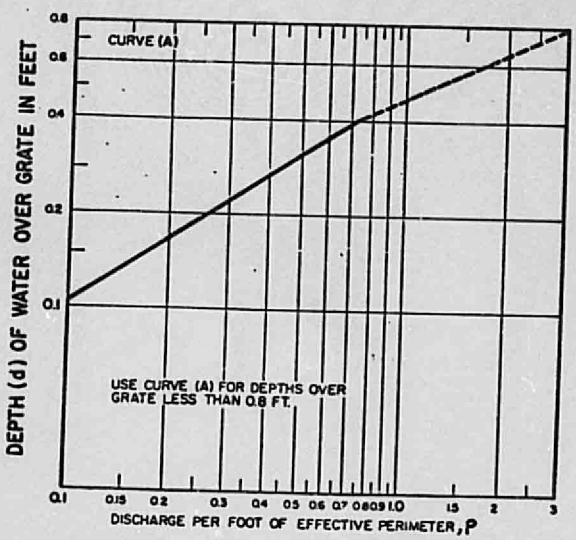
A = AREA OF CLEAR OPENING IN GRATE

TO ALLOW FOR CLOGGING DIVIDE P OR A BY 2 BEFORE OBTAINING d, water depth

WITHOUT CURB P = 2(B + L_b)

$A = 5 \cdot L_b \cdot W$





BUREAU OF PUBLIC ROADS
REV. AUG. 1968

HYDRAULIC CAPACITY OF GRATE INLET IN SUMP

Fig. 4.6.10.11

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LOCATION Irving Business Park
PROJ. NO. 802.42
DATE 6/19/85
DESIGNER KF
PAGE A-168

Revised drainage

Revised Grading Plan such that Area 1 remains the same and remaining areas combine to flow to 1 discharge point @ north end.

Area 1 hydrology remains same.
Combine remaining areas.

Developed	Undeveloped
0.47	8.94
1.09	1.56
3.36	10.50 ac.
1.81	
0.83	
7.16 ac	

$\Sigma C \times A = (7.16)(0.90) + 10.50(0.30) = 9.59$

Time of Concentration

Offsite	On site
L = 350	L = 1280
$\Delta E1 = 5160 - 5105 = 55'$	$\Delta E1 = 5105 - 5088 = 17'$
S = 0.1571	S = 0.0133
Tc = 1.45 min	Tc = 10.16 min
Tc = 1.45	10.16 + 1.45 = 11.61 min

Intensity

$I_{10} = 6.84(1.45)(11.61)^{-.51} = 2.84$ iph
$I_{100} = 6.84(2.20)(11.61)^{-.51} = 4.31$ iph

Flows

$Q_{10} = (9.59)(2.84) = 27.2$ cfs
$Q_{100} = (9.59)(4.31) = 41.3$ cfs

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LOCATION AREA 1 INLET

PROJ. NO.

DATE

DESIGNER

PAGE A-17

AREA 1

Q_{100} = 8.7 cfs

CLOSED CONDITION: DOUBLE "D" Q = 8.7 cfs H = 0.49'

CLEAR CONDITION: SINGLE "D" Q = 8.7 cfs H = 0.41'

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LOCATION PIPE FLOW
PROJ. NO. 802.12
DATE
DESIGNER
PAGE A-19

CHECK LINE CAPACITY

LINE A

Q_{100} = 8.7 cfs

MANNINGS
PIPE FLOW
Q=22.42 CFS
n=0.0130
DI=15.0 IN
Y=1.25 FT
S=0.12050 F/F
V=18.27 FPS
A=1.23 SF
R=0.31

MANNINGS
PIPE FLOW
Q=8.70 CFS
n=0.0130
DI=15.0 IN
Y=0.54 FT
S=0.12050 F/F
V=17.13 FPS
A=0.51 SF
R=0.28

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LOCATION CONCRETE RUNDOWN
PROJ. NO. 802.12
DATE
DESIGNER
PAGE A-21

DEPTH AT ENTRANCE

$Q = 44.5$ cfs

$F^2 = \frac{V^2}{gd} = 1$ @ CRITICAL DEPTH

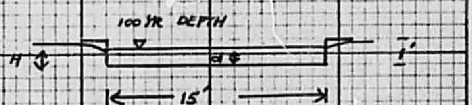
$V = Q/A$

$A = 15d$

$\left(\frac{44.5}{15d}\right)^2 = gd$

$d = 0.65'$

$Q = 32.2$



$H = \frac{0.65}{0.67} = 0.97'$ DEPTH BEFORE DRAWDOWN

CONJUGATE DEPTH

CONJUGATE
DEPTH
Q=44.50 CFS
BW=5.00 FT
H/V=0.00
Y1=0.39 FT
V1=22.82 FPS
Y2=3.36 FT
V2=2.65 FPS

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LOCATION Concrete Rundown
PROJ. NO. 802.12
DATE 4/25/85
DESIGNER KF
PAGE A-22

STA=0.00
Q=44.50
X=0.00
B=15.00
Y=0.65
A=9.75
R=0.60
R↑4/3=0.5040
V=4.56
VH=0.3558
Ec=1.0058
dE=0.0000
SF=0.00315
SFa=0.00000
S=0.30000
S-SFa=0.30000
dX=0.0000

STA=10.00
Q=44.50
X=10.00
B=13.39
Y=0.24
A=3.23
R=0.23
R↑4/3=0.1432
V=13.78
VH=3.2441
Ec=3.4852
dE=2.4794
SF=0.10098
SFa=0.05206
S=0.30000
S-SFa=0.24794
dX=10.0002

STA=20.00
Q=44.50
X=10.00
B=11.77
Y=0.22
A=2.63
R=0.21
R↑4/3=0.1287
V=16.95
VH=4.9077
Ec=5.1307
dE=1.6455
SF=0.16992
SFa=0.13545
S=0.30000
S-SFa=0.16455
dX=10.0000

STA=30.00
Q=44.50
X=10.00
B=10.16
Y=0.23
A=2.36
R=0.22
R↑4/3=0.1349
Y=18.92
VH=6.[illegible]89
Ec=6.2817
dE=1.1509
SF=0.19990
SFa=0.18491
S=0.30000
S-SFa=0.11509
dX=10.0002

STA=40.00
Q=44.50
X=10.00
B=8.55
Y=0.26
A=2.20
R=0.24
R↑4/3=0.1513
V=20.24
VH=6.9948
Ec=7.2520
dE=0.9703
SF=0.20604
SFa=0.20297
S=0.30000
S-SFa=0.09703
dX=10.0002

STA=50.00
Q=44.50
X=10.00
B=6.94
Y=0.30
A=2.07
R=0.27
R↑4/3=0.1780
V=21.55
VH=7.9314
Ec=8.2290
dE=0.9770
SF=0.19857
SFa=0.20231
S=0.30000
S-SFa=0.09769
dX=10.0001

STA=62.00
Q=44.50
X=12.00
B=5.00
Y=0.39 ←
A=1.94
R=0.34
R↑4/3=0.2334
V=22.94
VH=8.9980
Ec=9.3779
dE=1.1489
SF=0.17164
SFa=0.18511
S=0.30000
S-SFa=0.11489
dX=10.0000

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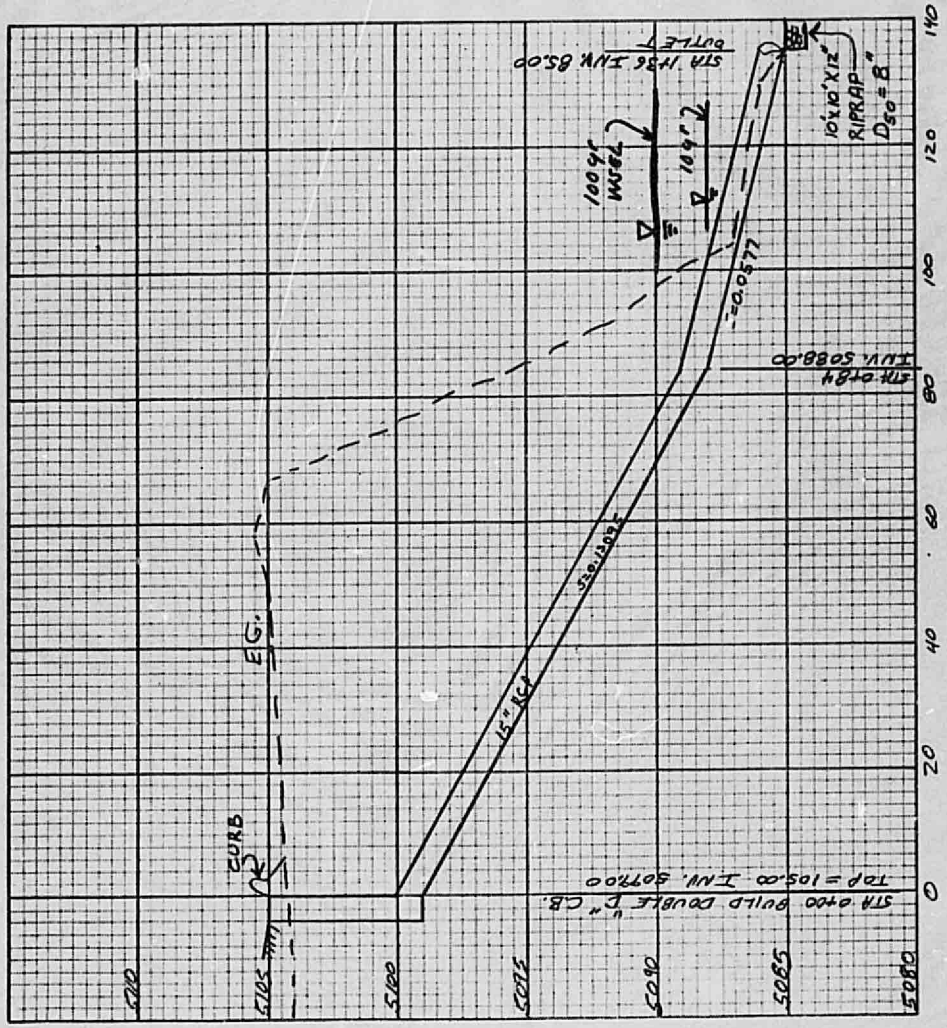
LOCATION IRVING BUSINESS PARK

PROJ. NO.

DATE

DESIGNER

PAGE A-23



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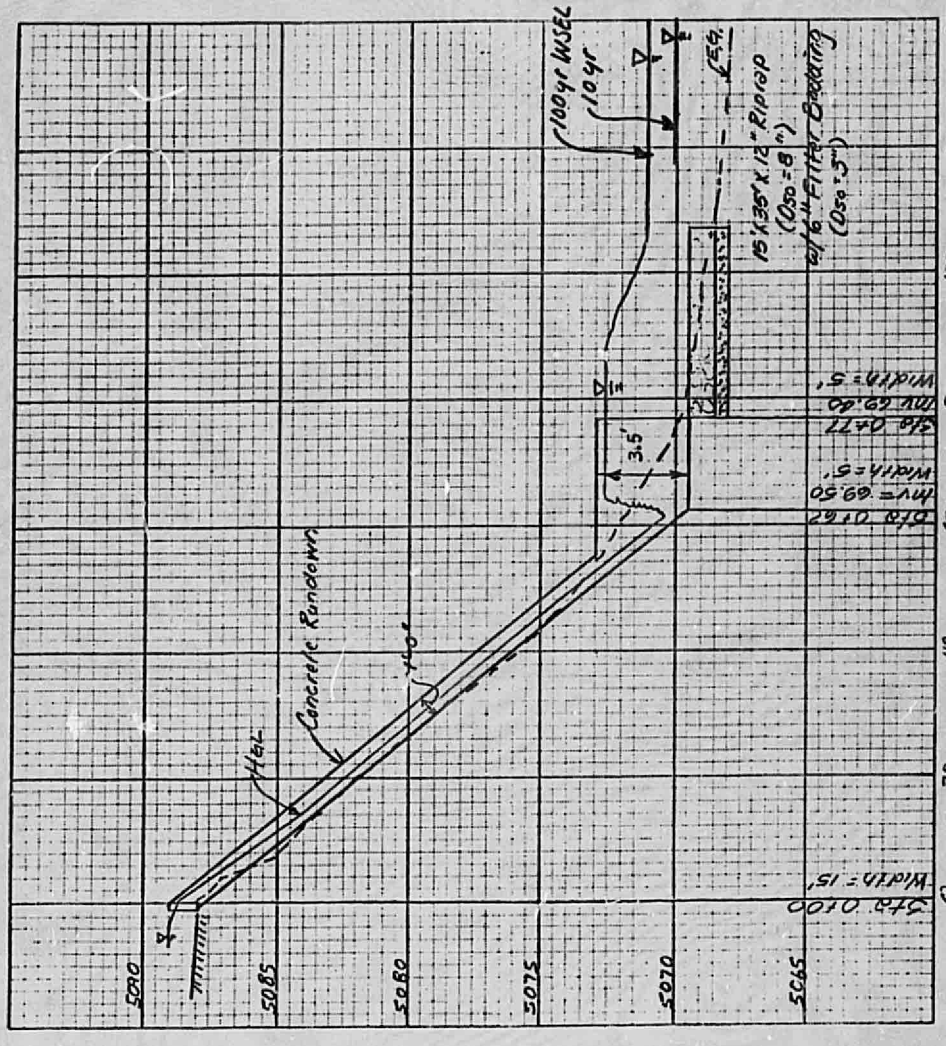
LOCATION CONCRETE RUNDOWN

PROJ. NO.

DATE

DESIGNER

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LOCATION Irving Business Park
PROJ. NO. 84.202.12
DATE 6/18/85
DESIGNER KSF
PAGE A-29

Floodway & Flood Boundary Map Panel 2
Section on Rapido
K, L, M, N

	500 yr	100 yr	10 yr	Q_{500}	Q_{100}	Q_{10}
K	5077	5072.0	5069.9			
L	5084.2	5078.6	5073.7			
M	5089.4	5085.6	5081.3			
N	5098.0	5093.2	5089.5	26200	11900	2460

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LOCATION
PROJ. NO.
DATE
DESIGNER
PAGE A-32

The 100 yr water surface elevation was plotted on the grading plan.
By plotting, scaling and interpolating, the following was obtained.

West outlet pipe: 100 yr WSEL = 5090
10 yr WSEL = 5086

Drop chute: 100 yr WSEL = 5072.0
10 yr WSEL = 5069.0

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LOCATION Ivins Business Park
PROJ. NO. 802.12
DATE 6/16/85
DESIGNER KE
PAGE A-31

Area 2A

A = 8.01 acres
ΔElev = 5150 − 5105 = 54'
L = 350
T_c = 1.38 min use 10 min
I_{10} = 3.06
Q_{10} = 8.2 cfs
V_{10} = 0.30(1.45)(8.94)(½) = 0.32 ac ft

Street

L = 800'
A = (800)(32) = 0.59
T_c = 10 min
I_{10} = 3.06
Q_{10} = 1.62 cfs
V_{10} = 0.90(1.45)(0.59)(½) = 0.06 ac ft

Σ = 0.38 ac ft

Area 2B

A = 1.56
T_c = 10 min
I = 3.06
Q = 1.43 cfs
V_{10} = (0.30)(1.45)(1.56)(½) = 0.06 ac ft

Street

L = 650
A = (650)(32) = 0.48 ac
T_c = 10
I = 3.06
Q_{10} = 1.32 cfs
V_{10} = 0.90(1.45)(0.48)(½) = 0.05 ac ft

Σ = 0.11 ac ft

APPENDIX B

LIST OF FIGURES

1. LOCATION MAP
2. FLOOD PLAIN MAP
3. TOPOGRAPHY & DRAINAGE AREAS
4. IRVING BLVD. TYPICAL SECTION
5. SOILS MAP
6. GRADING PLAN (2 SHEETS, 24" x 36")
7. PIPE PROFILE
8. CONCRETE RUNDOWN
9. EROSION CONTROL PLAN

PLAN/PLATS

ON

FILE

