

# DRAINAGE INFORMATION SHEET

PROJECT TITLE: Sirloin Stockade ZONE ATLAS/DRNG. FILE #: E-14/104

LEGAL DESCRIPTION: Tract 1-B, Monroe Enterprises

CITY ADDRESS: 6225 Fourth St. NW

ENGINEERING FIRM: Mark Goodwin and Assoc. CONTACT: Mark Goodwin, P.E.

ADDRESS: P.O. Box 21307 Alb. 87154 PHONE: 294-9961

OWNER: Charles Monroe CONTACT: Same

ADDRESS: 4501 Bogan NE Alb. 87109 PHONE: 884-0370

ARCHITECT: N/A CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: Southwest Surveying CONTACT: Dan Graney

ADDRESS: 333 Lomas NE Alb. 87102 PHONE: 247-4444

CONTRACTOR: N/A CONTACT: \_\_\_\_\_

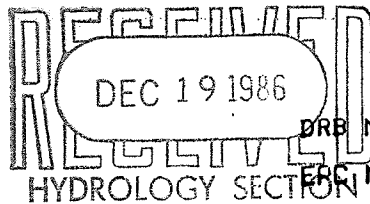
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## PRE-DESIGN MEETING:

☒ YES

☐ NO

☒ COPY OF CONFERENCE RECAP SHEET PROVIDED



DRB NO. \_\_\_\_\_

ERC NO. \_\_\_\_\_

PROJ. NO. \_\_\_\_\_

## TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION

## CHECK TYPE OF APPROVAL SOUGHT:

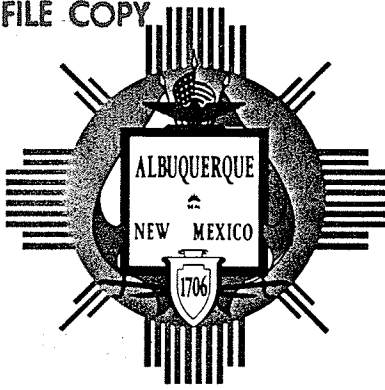
- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE DEVELOPMENT PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY APPROVAL
- ☐ ROUGH GRADING PERMIT APPROVAL
- ☐ GRADING/PAVING PERMIT APPROVAL
- ☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: 12/19/86

BY: Mark Goodwin  
Mark Goodwin, P.E.

# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103



January 8, 1987

Mark Goodwin  
DMG & Associates  
Post Office Box 21307  
Albuquerque, New Mexico 87154

RE: REVISED DRAINAGE PLAN FOR SIRLOIN STOCKADE @ 6225 FOURTH  
STREET, NW (E-14/D4) RECEIVED DECEMBER 19, 1986

Dear Mark:

I have reviewed the above referenced submittal and hereby approve it for obtaining a building permit.

I have also approved your plan for the sidewalk culvert and have forwarded it to the appropriate permit section.

Please attach a copy of the revised plan, dated December 18, 1986, to the construction sets prior to Hydrology sign-off. Also, please advise the contractor that he will be required to show proof of permit and acceptance of the sidewalk culvert for Hydrology to sign-off on the Certificate of Occupancy.

Should you have any questions, or if this office can be of further assistance, please call me at 768-2650.

Cordially,

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

cc: Rick Duran, Drainage Inspector  
Charles Monroe

BJG/bsj



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz  
Mayor

UTILITY DEVELOPMENT DIVISION  
HYDROLOGY SECTION  
(505) 768-2650

August 12, 1987

Chuck Monroe  
4501 Bogan Avenue, NE  
Albuquerque, New Mexico 87109

RE: SIRLOIN STOCKADE RESTAURANT, 6225 FOURTH STREET, NW

Dear Mr. Monroe:

On July 27, 1987, a complaint was filed with our office pertaining to flooding caused by runoff from the above referenced site. It is my understanding that a revised plan was submitted to our section for review and approval. On July 28, 1987, a survey was conducted to determine what type of problem exists. We found that:

1. New top of wall grades of 4980.0 elevation were not constructed,
2. The emergency spillway elevation should have been located at the driveway into Solar Road.
3. Emergency spillway as it exists is directly in front of Mr. Wayne Ciddio's backyard, thus causing flooding within his backyard.

Please provide this office with confirmation as to what will be done to correct this problem. Also, you are welcome to have a copy of our survey notes.

If I can be of any assistance to you, please call me at 768-2650.

Cordially,

*Bernie J. Montoya*

Bernie J. Montoya, CE  
Engineering Assistant

cc: Mr. Wayne Ciddio  
6212 Sabre Court, NW

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

Telephone (505) 768-2500

FILE COPY



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz  
Mayor

UTILITY DEVELOPMENT DIVISION  
HYDROLOGY SECTION  
(505) 768-2650

December 8, 1987

Charles L. Monroe, III  
Sirloin Stockade Restaurants  
4501 Bogan, NE Suite A-1  
Albuquerque, New Mexico 87109

RE: DRAINAGE PROBLEMS, SIRLOIN STOCKADE RESTAURANT  
6225 FOURTH STREET, NW (E-14/D4)

Dear Mr. Monroe:

Thank you for taking your time to meet with Carlos Montoya and me on the site last Friday. This letter will summarize our discussion and the conclusions we reached.

We agreed that the simplest and most effective means of controlling the storm runoff within the areas designated for it would be as follows:

1. raise the header curb by twelve inches all along the west boundary and for approximately forty feet along the north boundary, starting from the northwest corner;
2. remove the plastic liner from the graveled swale ditch, and regrade the ditch to drain to the street; and
3. plant a ground cover or grass in the ponding area and swale ditch to improve the permeability of the soil.

You said that you would schedule work to begin right after the first of the new year, and expect to have things completed by January 30, 1988.

PUBLIC WORKS DEPARTMENT

Walter Nickerson, P.E., City Engineer

ENGINEERING GROUP

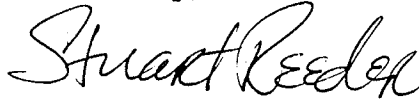
Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

Charles L. Monroe, III  
December 8, 1987  
Page 2

I appreciate your cooperation, and anticipate that this should end the problems of your runoff entering Mr. Ciddio's backyard. If you have any questions, please do not hesitate to call me at 768-2650.

Cordially,

A handwritten signature in cursive script that reads "Stuart Reeder".

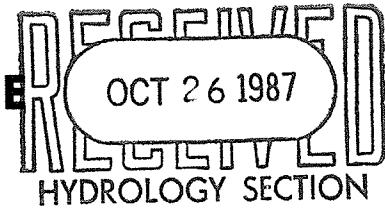
G. Stuart Reeder, P.E.  
C.E./Hydrology Section

xc: Wayne Ciddio  
Vincent E. Griego, Councillor Dist. 2  
Adelia W. Kearny, Asst. City Attorney  
File

GSR/bsj

# CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO



INTER-OFFICE CORRESPONDENCE

October 26, 1987

REF. NO. \_\_\_\_\_

TO: Stuart Reeder, Civil Engineer, Hydro. Sec., PWD  
FROM: Adelia W. Kearny, Assistant City Attorney *AK*  
SUBJECT: Sirloin Stockade Drainage Question

As we discussed on October 22, Fred Aguirre called me on October 6 to discuss the Sirloin Stockade situation and the fact that the City had issued a Certificate of Occupancy, but the agreed-upon drainage features had not been constructed according to the drainage plan. I researched the issue and called Fred back on October 8. As a result of that conversation Fred agreed that Hydrology would check the facts in more detail and Hydrology would draft a letter requiring the owner to cause the work to be completed according to the plan. The letter would suggest to the owner that he may have recourse against the contractor, or the contractor's warranty bond, if necessary. The draft letter was to be submitted to me for review. I gather you have been assigned the job and will be sending me the draft soon.

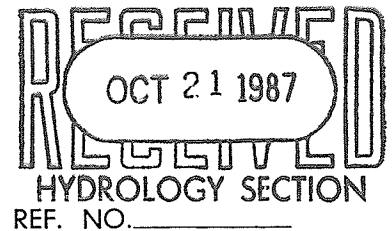
Please call if you have any questions or if I can be of assistance.

AWK/mlg

cc: Fred Aguirre, Hydrologist, Hydro. Section, PWD  
Vincent E. Griego, Councillor, District 2  
Mac deVesty, Assistant City Attorney

# CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO



INTER-OFFICE CORRESPONDENCE

October 16, 1987

TO: Fred Aguirre, Hydrologist, Public Works Department  
FROM: Vincent E. Griego, Councillor, District 2  
SUBJECT: Drainage - 6225 4th St., N.W. - Sirloin Stockade

A handwritten signature in cursive script, appearing to read "Vincent E. Griego".

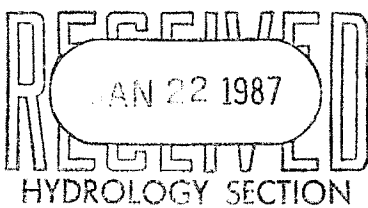
It is my understanding that the drainage associated with the remodeling of the Sirloin Stockade at the above location was never built as per the approved plans. A City inspector, however, provided final approval to the project and the restaurant was issued a certificate of occupancy. In the meantime, during the last heavy rainfall, runoff from the Sirloin Stockade caused a problem to the adjacent property, 6212 Sabre Ct., N.W., owned by Mr. Wayne Ciddio.

I am told that the Legal Department has been requested to provide advice on how the City should proceed since the owner of the restaurant has not been inclined to correct the problem. By copy of this correspondence, I would request the Legal Department to expedite their review of this matter. It is of the utmost importance that the drainage situation be corrected before any further damage results to Mr. Ciddio's property.

Please feel free to call on me if I can be of assistance.

VEG:bg  
52

cc: James Foley, City Attorney  
Wayne Ciddio, 6212 Sabre Ct., N.W.



January 19, 1987

Mr. Fred Aguirre  
Design Hydrologist  
Engineering Division  
Municipal Development Department  
City of Albuquerque  
P.O. Box 1293  
Albuquerque, NM 87103

Dear Mr. Aguirre:

Two months have passed since Mr. Charles Monroe, III, owner of the Sirloin Stockade restaurants, wrote in a letter to you that he was looking into solving the drainage problem that has caused repeated flooding of my backyard at 6212 Sabre Court, N.W. Aside from a visit by two representatives of a surveying firm to my home several weeks ago, nothing further has been done to correct the problem.

Nevertheless, during the same two month time period since his last letter to you, Mr. Monroe has found the time and the resources to undertake an extensive remodeling and expansion of the Fourth Street restaurant. Did the city division charged with issuing Mr. Monroe the necessary building permits know that Mr. Monroe's current facility is in violation of the drainage code? I suspect not.

I would remind you that it has now been three months since the City became re-involved in this matter -- and more than two years since the City initially told me they couldn't help me -- and the problem remains unsolved.

I would appreciate hearing from you at your earliest convenience.

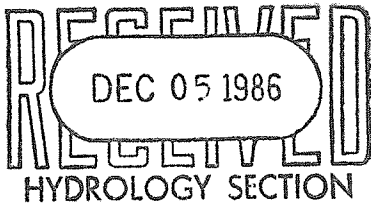
Sincerely,

*Wayne W. Ciddio*

Wayne W. Ciddio  
6212 Sabre Court, N.W.  
Albuquerque, NM 87107  
Ofc. Tel. 842-0220  
Res. Tel. 345-3282

*called  
1/22/87  
5:16 PM Jim Burr*





**FAMILY STEAKHOUSES & RESTAURANTS**

EXECUTIVE OFFICES  
PHONE: (505) 884-0370

4501 BOGAN, N.E., SUITE A-1  
ALBUQUERQUE, NEW MEXICO 87109

November 18, 1986

Mr. Fred Aguirre  
City of Albuquerque  
Hydrology Section  
123 Central Avenue  
Albuquerque, N.M. 87102

Re: Sirloin Stockade Restaurant  
6225 4th Street, N.W.

Dear Mr. Aguirre,

I would like to confirm our conversation of November 14, and assure you that I will investigate the drainage situation at the above referenced location. I will have an engineering firm survey the lot and make a recommendation to me, hopefully based on the current ordinance, as the plan formed under the ordinance in effect in 1978 has apparently not been satisfactory in handling the off site flows, particularly to the West. As soon as I have a recommendation, I will get in touch with you, so that you and Mr. Duran and myself can get together to discuss same.

Please be assured that I am very interested in curing any problem at this site and am sure that we can form a plan that will accomplish our desired objectives.

Sincerely yours,

Charles L. Monroe III

CLM/mh

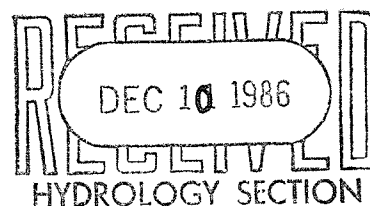
cc Mr. Richard Duran  
Mr. Wayne Ciddio  
Mr. Chris Huston



D. MARK GOODWIN & ASSOC.  
CONSULTING ENGINEERS

JOB Siribin Stockade  
SUBJECT Drainage  
JOB NO. \_\_\_\_\_ SHEET 1 OF 6  
BY MG DATE 12/5/86  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

### DISCUSSION

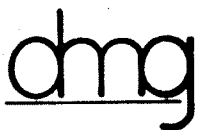


Owner proposes to construct an addition of approx. 500 S.F. to an existing 3200 S.F. restaurant. Proposed addition will not increase runoff since addition will occur into an existing paved area (see Grading Plan).

Site was initially constructed in 1978 reportedly utilizing a Grading & Drainage Plan prepared by Enchantment Engineering (City File E14/DA). Topographic Survey obtained 12/4/86 clearly indicates that the site improvements were not constructed in accordance with the approved plan. Therefore, the approved plan will not be analyzed.

Currently, the existing site grading breaks the site into 3 subdrainage areas. Drainage areas 2 & 3 comprise approx. 1/3 of the total site area and do not contribute to any problems we are aware of. Drainage area 1 comprising approx. 2/3 of the site drains to the northwest into a Landscaping/Ponding area that does not have a large enough volume to control the stormwaters that reaches it. The excess volume is spilling over into a residential area adjacent to the pond. This is the problem we will rectify with this plan.

Method of analysis will utilize the Rational Formula so as to remain consistent with the original plan.



D. MARK GOODWIN & ASSOC.  
CONSULTING ENGINEERS

JOB Sirloin Stockade  
SUBJECT Drainage  
JOB NO. \_\_\_\_\_ SHEET 2 OF 6  
BY MG DATE 12/7/86  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

### RUNOFF CALCULATIONS

in addition to calculating runoff for D.A. #1, we will provide the flow rates for D.A. #2 & D.A. #3 for informational purposes. There are no offsite flows.

Total site Area = 0.781 Ac.

Area D.A. #1 = 0.541 Ac. (includes proposed addition)

Area D.A. #2 = 0.21 Ac.

Area D.A. #3 = 0.03 Ac.

$P(100\text{ yr}-6\text{ Hr}) = 2.2\text{ in.}$

$T_c = 10\text{ min.}$  (minimum value) for all 3 areas

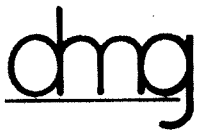
$I_{100} = 4.65\text{ in./hr.}$  for all 3 Areas

### Determining Composite "C" Values:

Drainage Area #1: (includes proposed addition)

<u>SURFACE</u>	<u>"C"</u>	<u>A</u>	<u>CA</u>
Paved Areas	0.95	.472	.448
Roofs	0.90	.037	.033
Landscaped	0.25	.032	.008
		<u>0.541</u>	<u>0.489</u>

Composite "C" = .90



D. MARK GOODWIN & ASSOC.  
CONSULTING ENGINEERS

JOB Sirlein Stockade  
SUBJECT Drainage  
JOB NO. \_\_\_\_\_ SHEET 3 OF 4  
BY MG DATE 12/7/86  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

DRAINAGE AREA #2:

<u>SURFACE</u>	<u>C</u>	<u>A</u>	<u>CA</u>
Paved	0.95	0.129	.123
Roof	0.95	.037	.033
Landscaped	0.25	.044	.011
		0.210	0.167

composite "C" = .80

Drainage Area #3 is comprised solely of paved parking area → Composite "C" = 0.95

Determine Peak Rate of Runoff & Volume

DRAINAGE AREA #1:

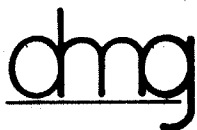
$$Q = CIA = 0.90 (4.65) (0.541) = 2.3 \text{ cfs}$$

$$\text{Vol.} = CDA = 0.90 (2.2) (0.541) \left(\frac{1}{12}\right) (43,560) = 3900 \text{ cu. ft.}$$

DRAINAGE AREA #2:

$$Q = 0.80 (4.65) (0.210) = 1 \text{ cfs}$$

$$\text{Vol.} = 0.80 (2.2) (0.210) \left(\frac{1}{12}\right) (43560) = 1350 \text{ cu. ft.}$$



D. MARK GOODWIN & ASSOC.  
CONSULTING ENGINEERS

JOB Sirloin Stockade  
SUBJECT Drainage  
JOB NO. \_\_\_\_\_ SHEET 4 OF 4  
BY MG DATE 12/7/20  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

DRAINAGE AREA # 3:

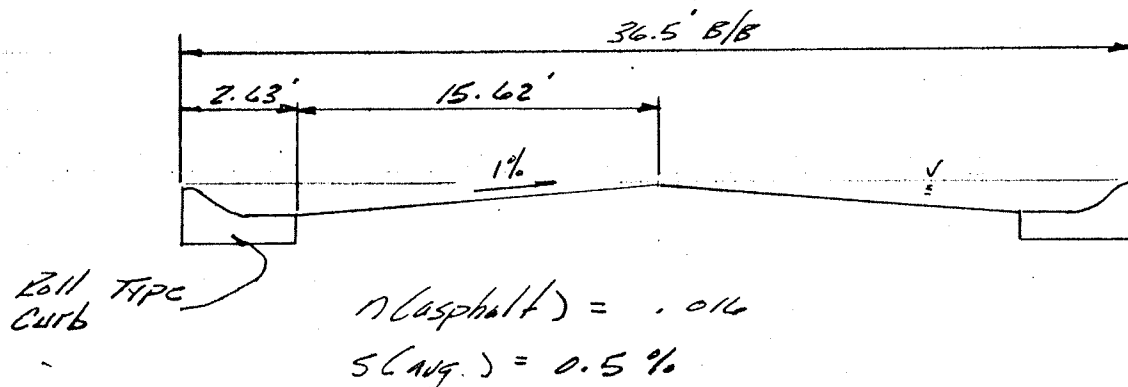
$$Q = 0.95(4.65)(0.03) = 0.1 \text{ cfs}$$

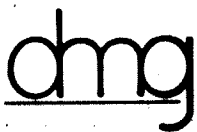
$$\text{Vol.} = 0.95(2.2)(0.03)\left(\frac{1}{12}\right)(43560) = 230 \text{ cu. ft.}$$

this plan will not address the runoff from D.A. 2 & D.A. 3. We will resolve the problems associated with D.A. #1. The ideal solution will be to collect the runoff from D.A. #1 in the western landscaped area to be conveyed to Solar Rd. to the south. In order for this scheme to work, Solar Rd. will have to have the capacity to carry the additional flow.

Site is located 55' from high point in Solar - site is at the top of contributory drainage area.

Determine Capacity of Solar Rd.:





D. MARK GOODWIN & ASSOC.  
CONSULTING ENGINEERS

JOB Sirloin Stockade  
SUBJECT Drainage  
JOB NO. \_\_\_\_\_ SHEET 5 OF 6  
BY MG DATE 12/7/86  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

$$Area = 2\left(\frac{1}{2}\right)(0.271)(18.25) = 5 \text{ sq. ft.}$$

$$W.P. = 37 \text{ ft.}$$

$$V = \frac{1.486}{n} R^{2/3} S^{1/2} = \frac{1.486}{.016} \left(\frac{5}{37}\right)^{2/3} (0.005)^{1/2} = 1.73 \text{ fps}$$

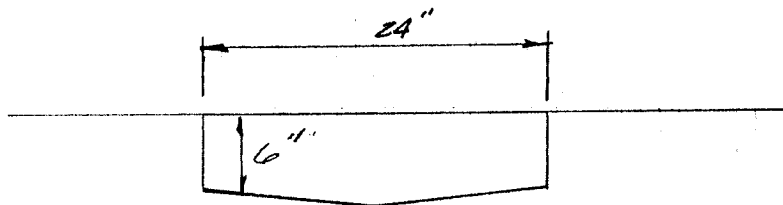
$$Q = AV = 5(1.73) = 8.65 \text{ cfs} > 2.3 \text{ cfs}$$

Sirloin Stockade site contributes  $\frac{1}{4}$  of capacity of Solar Rd. yet comprises more than  $\frac{1}{2}$  of drainage area. Direct discharge certainly seems justified.

Method of discharge will have to be accomplished via modified sidewalk culverts. Culverts will be modified since they will terminate at mountable roll type curb.

Proposed culvert(s) will be 6 $\frac{1}{2}$ " deep

Determine Capacity of 1 culvert, 24" wide:



$$n = 0.015 \text{ (concrete)}$$

$$S(\text{avg.}) = 0.5\%$$



D. MARK GOODWIN & ASSOC.  
CONSULTING ENGINEERS

JOB Sirloin Stockade  
SUBJECT Drainage  
JOB NO. \_\_\_\_\_ SHEET 6 OF 6  
BY MLG DATE 12/7/86  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

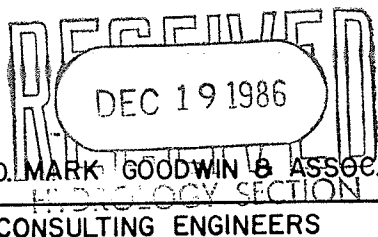
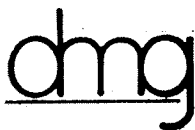
$$\text{Area} = 0.5(2) + (0.042)(2) = 1.084 \text{ sq. Ft.}$$

$$WP = 3.002'$$

$$V = \frac{1.486}{.015} \left( \frac{1.084}{3.002} \right)^{2/3} (.005)^{1/2} = 3.55 \text{ fps}$$

$$Q = 1.084(3.55) = 3.85 \text{ cfs}$$

for design  $Q = 2.3 \text{ cfs}$  need 1-24" sidewalk culvert



JOB Sirleia Stockade  
SUBJECT Drainage Revisions  
JOB NO. \_\_\_\_\_ SHEET 1 OF 4  
BY MG DATE 12/18/86  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

### Determine Capacity of Sidewalk Culvert

Culvert will act as a Wier

$$Q = CLH^{3/2}$$

$$L = 2.0'$$

$$C = 2.95 \text{ from King}$$

$$H = 0.5'$$

$$Q = 2.95(2.0)(0.5)^{3/2} = 2.1 \text{ cfs close to } 2.3 \text{ o.k.}$$

Volumes to be Calculated per modified SCS  
(see attachment)



## HYDROGRAPH COMPUTATION WORKSHEET

 DATE 12/12/86  
 COMPUTED BY MA G  
 CHECK BY \_\_\_\_\_

PROJECT Sirboin Stockade  
 LOCATION N 4th Street  
 ANALYSIS POINT # 1  
 (DR. AREA) A = 0.541 ACRES  
 $T_c$  10 MIN  
 POINT RAINFALL 2.2 IN. FROM PLATE 22.2 D-1  
 CN = 88 FROM PLATES 22.2 C-2, 22.2 C-3  
 RUNOFF VOLUME R = 1.2 IN. FROM PLATE 22.2 C-4  
 COMPUTED  $T_p$  = 10 MIN.  $T_p = T_c$   
 (Rounded to even minute)  
 $q_p = \frac{45.4A}{T_p} = \frac{2.4}{10}$  CFS./INCH OF RUNOFF  
 $(R \times q_p) = Q_{peak} = \frac{2.8}{10}$  CFS  
 $t(\text{COLUMN}) = (t/T_p) \quad t = T_p(t/T_p)$   
 $y = \frac{Q}{Q_{peak}} \quad Q = y(Q_{peak})$

	(t/T <sub>p</sub> )	t (min.)	y	Q (cfs)
1	0	0	0	0
2	.1		.03	
3	.2		.10	
4	.3		.190	
5	.4		.310	
6	.5		.470	
7	.6		.660	
8	.7		.820	
9	.8		.930	
10	.9		.990	
11	1.0		1.00	
12	1.1		.990	
13	1.2		.930	
14	1.3		.860	
15	1.4		.780	
16	1.5		.680	
17	1.6		.560	
18	1.7		.460	
19	1.8		.390	
20	1.9		.330	
21	2.0		.280	
22	2.2		.207	
23	2.4		.147	
24	2.6		.107	
25	2.8		.077	
26	3.0		.055	
27	3.2		.040	
28	3.4		.029	
29	3.6		.021	
30	3.8		.015	
31	4.0		.011	
32	4.5		.005	
33	5.0		.000	

$$Vol. = RA\left(\frac{1}{12}\right)(43560) = 2360 ft^3$$

PLATE 22.2 F-1

# HYDROGRAPH COMPUTATION WORKSHEET

DATE 12/12/86  
COMPUTED BY MG  
CHECK BY \_\_\_\_\_

PROJECT Sirboin Stockade

LOCATION \_\_\_\_\_

ANALYSIS POINT # 2

(DR. AREA) A = 0.21 ACRES

$T_c$  10 MIN

POINT RAINFALL 2.2 IN. FROM PLATE 22.2 D-1

CN = 84 FROM PLATES 22.2 C-2, 22.2 C-3

RUNOFF VOLUME R = 0.9 IN. FROM PLATE 22.2 C-4

COMPUTED  $T_p$  = 10 MIN.  $T_p = T_c$   
(Rounded to even minute)

$q_p = \frac{45.4A}{T_p} = \frac{1}{10}$  CFS./INCH QF RUNOFF

$(R \times q_p) = Q_{peak} = \frac{1}{10}$  CFS

$t(\text{COLUMN}) = (t/T_p) \quad t = T_p(t/T_p)$

$y = \frac{Q}{Q_{peak}} \quad Q = y(Q_{peak})$

	(t/T <sub>p</sub> )	t (min.)	y	Q (cfs)
1	0	0	0	0
2	.1		.03	
3	.2		.10	
4	.3		.190	
5	.4		.310	
6	.5		.470	
7	.6		.660	
8	.7		.820	
9	.8		.930	
10	.9		.990	
11	1.0		1.00	
12	1.1		.990	
13	1.2		.930	
14	1.3		.860	
15	1.4		.780	
16	1.5		.680	
17	1.6		.560	
18	1.7		.460	
19	1.8		.390	
20	1.9		.330	
21	2.0		.280	
22	2.2		.207	
23	2.4		.147	
24	2.6		.107	
25	2.8		.077	
26	3.0		.055	
27	3.2		.040	
28	3.4		.029	
29	3.6		.021	
30	3.8		.015	
31	4.0		.011	
32	4.5		.005	
33	5.0		.000	

$$Vol. = 0.9(0.21)\left(\frac{1}{12}\right)(43,560) = 690 \text{ ft}^3$$

PLATE 22.2 F-1

# HYDROGRAPH COMPUTATION WORKSHEET

DATE 12/12/86  
COMPUTED BY MA G  
CHECK BY \_\_\_\_\_

PROJECT Sirboin Stockade

LOCATION \_\_\_\_\_

ANALYSIS POINT # 3

(DR. AREA) A = 0.03 ACRES

$T_c$  10 MIN

POINT RAINFALL 2.2 IN. FROM PLATE 22.2 D-1

CN = 97 FROM PLATES 22.2 C-2, 22.2 C-3

RUNOFF VOLUME R = 1.9 IN. FROM PLATE 22.2 C-4

COMPUTED  $T_p$  = 10 MIN.  $T_p = T_c$   
(Rounded to even minute)

$q_p = \frac{45.4A}{T_p} = \frac{45.4 \times 0.03}{10} = \underline{0.1}$  CFS./INCH OF RUNOFF

$(R \times q_p) = Q_{peak} = \underline{0.2}$  CFS

$t(\text{COLUMN}) = (t/T_p) \quad t = T_p(t/T_p)$

$y = \frac{Q}{Q_{peak}} \quad Q = y(Q_{peak})$

	(t/T <sub>p</sub> )	t (min.)	y	Q (cfs)
1	0	0	0	0
2	.1		.03	
3	.2		.10	
4	.3		.190	
5	.4		.310	
6	.5		.470	
7	.6		.660	
8	.7		.820	
9	.8		.930	
10	.9		.990	
11	1.0		1.00	
12	1.1		.990	
13	1.2		.930	
14	1.3		.860	
15	1.4		.780	
16	1.5		.680	
17	1.6		.560	
18	1.7		.460	
19	1.8		.390	
20	1.9		.330	
21	2.0		.280	
22	2.2		.207	
23	2.4		.147	
24	2.6		.107	
25	2.8		.077	
26	3.0		.055	
27	3.2		.040	
28	3.4		.029	
29	3.6		.021	
30	3.8		.015	
31	4.0		.011	
32	4.5		.005	
33	5.0		.000	

$$Vol. = 1.9(.03)\left(\frac{1}{12}\right)(45,560) = 210 \text{ ft}^3$$

PLATE 22.2 F-1



*[Signature]*  
TRAFFIC ENGINEER

*[Signature]* 11.3.77  
CITY ENGINEER

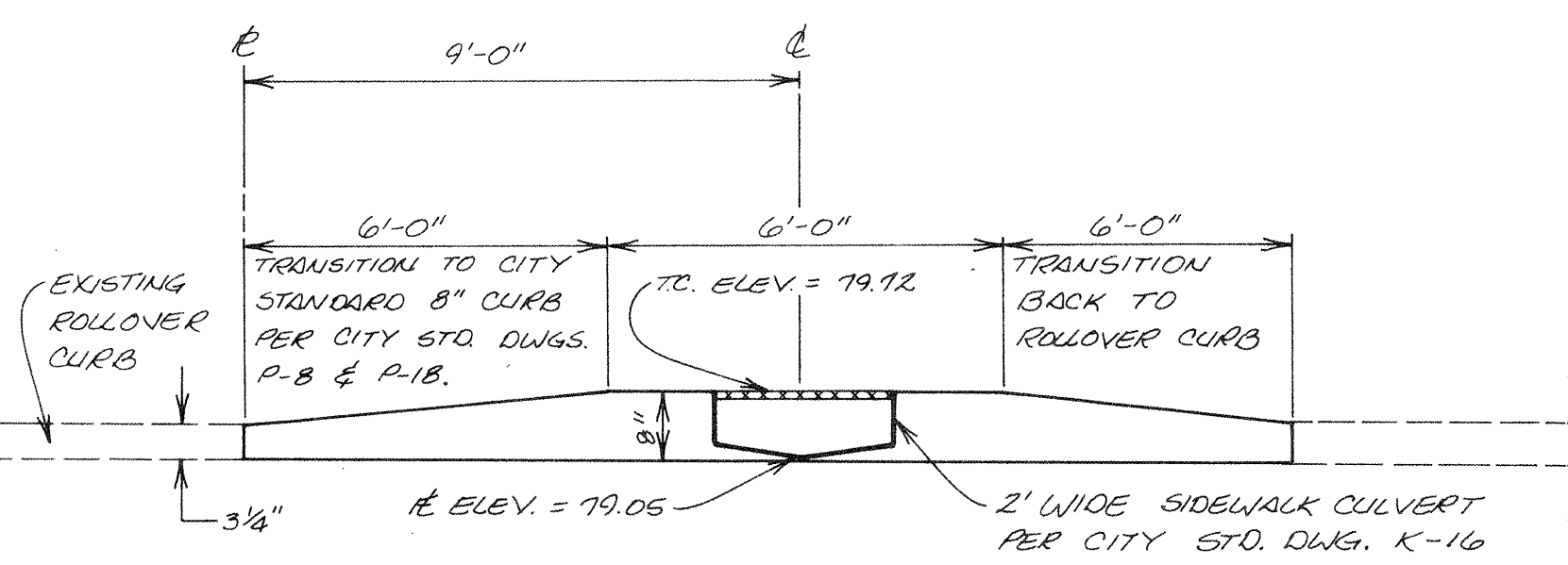
PLANNING DEPARTMENT



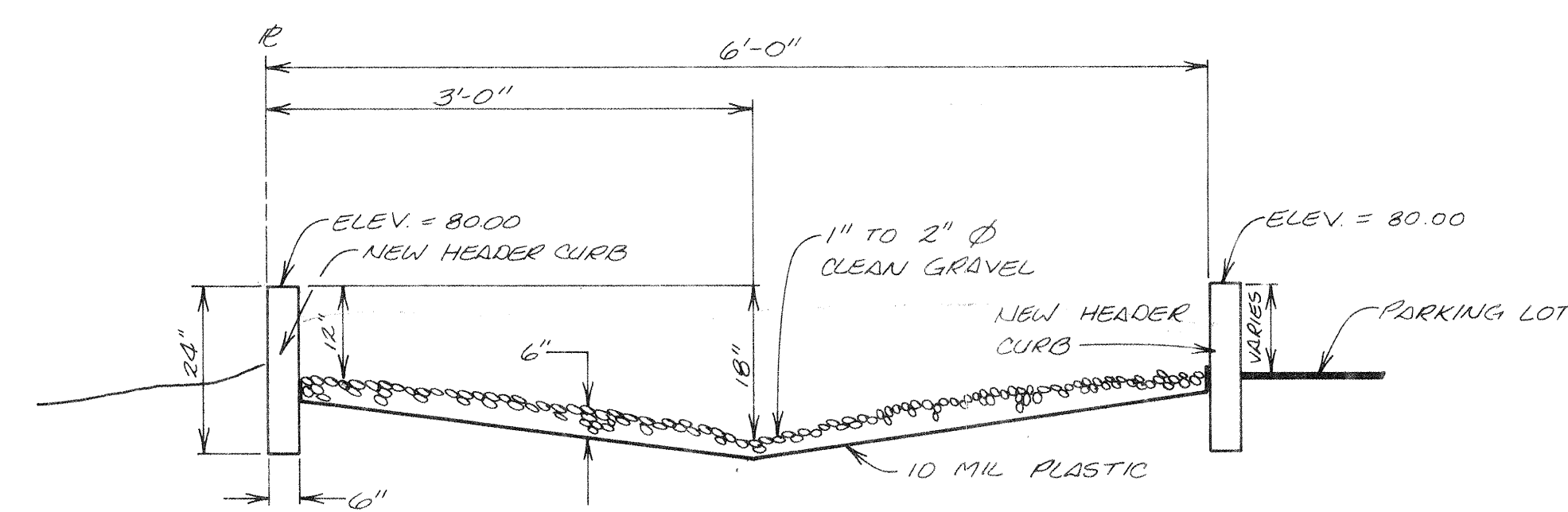
LANDSCAPE PLAN  
SCALE 1" = 20'

OWNERS SIRLOIN STOCKADE  
LOCATED AT NO 414 ST. & SOLAR DR. NW. ALB.  
DATE: 9-30-77 JOB# 7714  
REV. 10-25-77  
REV. 11-3-77  
PLAN PREPARED BY LEE LANDSCAPES INC.  
WILLIAM G. OSTIFAN, LANDSCAPE ARCHITECT.



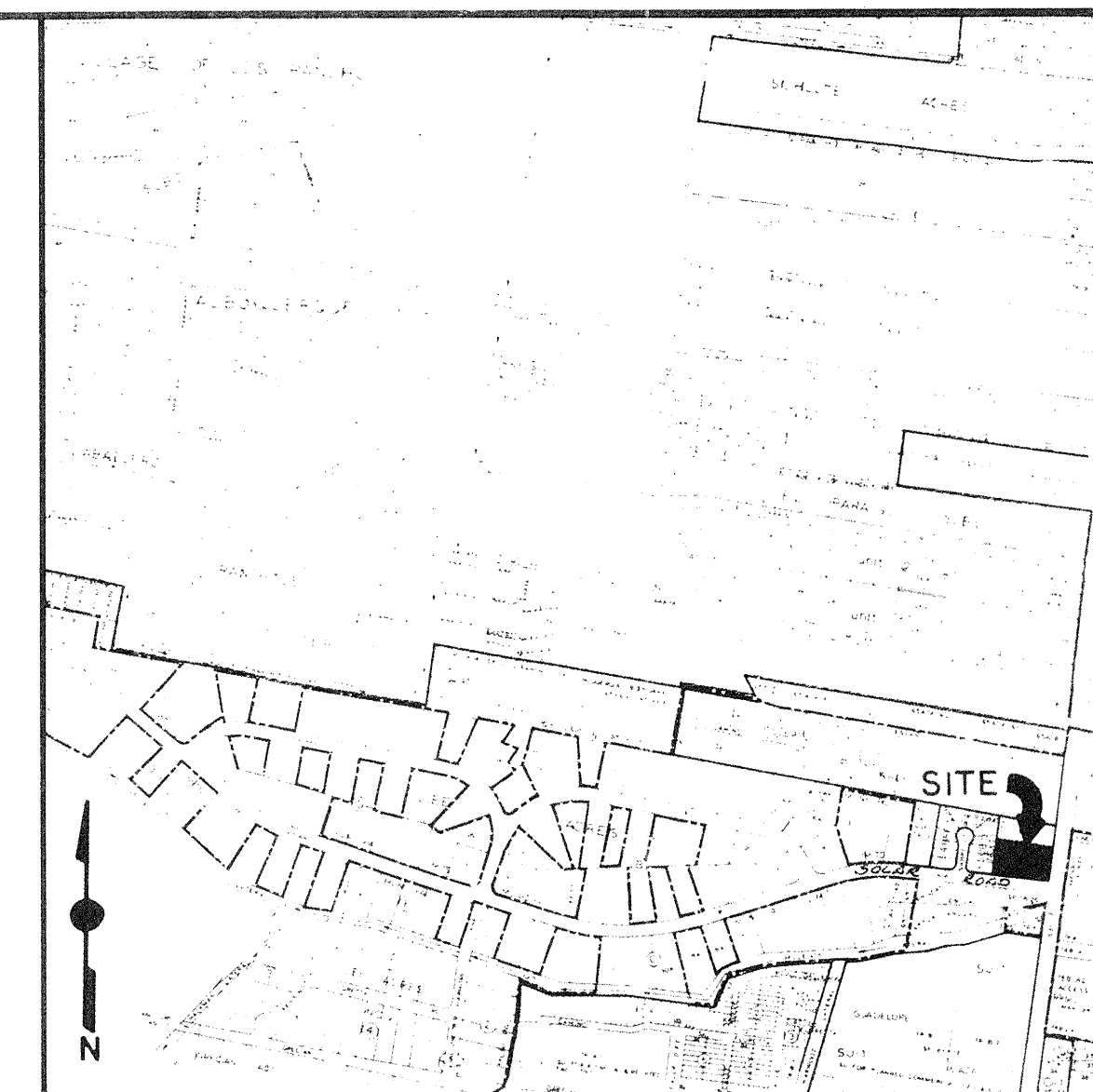


SECTION  
SCALE: NONE



SECTION  
SCALE: NONE

- LEGEND**
- CONCRETE
  - EXISTING SPOT ELEVATION (TOP OF CURB & ROW LINE)
  - PROPOSED SPOT ELEVATION (TOP OF CURB & ROW LINE)
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - EXISTING FEATURE OUTLINE (CURB, BLDG., ETC.)
  - FLOW ARROW
  - GRAVEL SURFACE
  - DRAINAGE AREA BOUNDARY
  - DRAINAGE AREA RESIGNATION
  - ROOF LEADER



VICINITY MAP  
SCALE: NONE

#### T.B.M.

THE TEMPORARY BENCHMARK IS LOCATED ON TOP OF THE CURB OF THE NW CORNER OF THE NE CORNER'S PLANTER/POUNDING AREA. ELEVATION = 4981.10' M.S.L.

#### ACS BENCHMARK

B.M. NO. 1-E14, A SQUARE, CHISELED ON THE WSW BASE OF THE CONCRETE WALL LOCATED AT THE INTERSECTION OF 4th STREET NW AND SOLAR ROAD NW IN THE SW QUADRANT OF THE INTERSECTION. ELEVATION = 4979.729.'

#### LEGAL DESCRIPTION

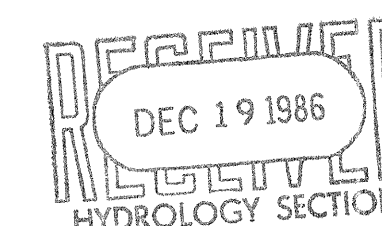
TRACT 1-B, LANDS OF MOORE ENTERPRISES, INC., ALBUQUERQUE, NM, COMPRISING TRACT 1 OF LANDS OF HELEN C. LOFTON AND ALBERT J. HOOGENDOORN, AS THE SAME IS SHOWN AND RESIGNATED ON THE PLAT THEREOF.

#### GENERAL NOTES

1. TOPOGRAPHIC SURVEY WAS PROVIDED BY SOUTHWEST SURVEYING, INC.
2. SITE DOES NOT LIE IN THE 100-YEAR FLOOD PLAIN.
3. ADD 490' TO ALL SPOT AND CONTOUR ELEVATIONS.
4. SEE SITE PLAN FOR TRUE DIMENSIONS.
5. ALL ELEVATIONS ARE M.S.L. (MEAN SEA LEVEL).
6. EXISTING CONTOUR INTERVAL IS 0.5'.
7. CONTRACTOR IS TO NOTIFY OWNER OF ANY DISCREPANCIES IN EXISTING GROUND ELEVATIONS PRIOR TO CONSTRUCTION.
8. 12" COMPACTED SUBGRADE TO A MINIMUM OF 95% ASTM D 1557 UNDER ALL AREAS TO BE PAVED.
9. NO OFF-SITE FLOWS ENTER THIS SITE.
10. CITY OF ALBUQUERQUE "INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," 1985 EDITION, ARE TO BE USED FOR ALL CONSTRUCTION WITHIN CITY RIGHT OF WAY.

#### NOTICE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided herein, shall be constructed in accordance with "Interim Standard Specifications For Public Works Construction", 1985 Edition.
3. Two working days prior to any excavation, contractor must contact the Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum of delay.
5. Backfill compaction shall be according to residential street use.
6. Maintenance of these facilities shall be the responsibility of the owner of the property served.
7. Contractor is responsible for obtaining excavation permit for the S. O. - 19 and provide proof of acceptance by the City prior to Hydrology sign off for Certificate of Occupancy.



SIRLOIN STOCKADE

GRADING AND DRAINAGE PLAN



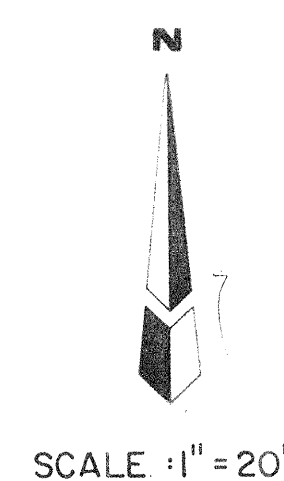
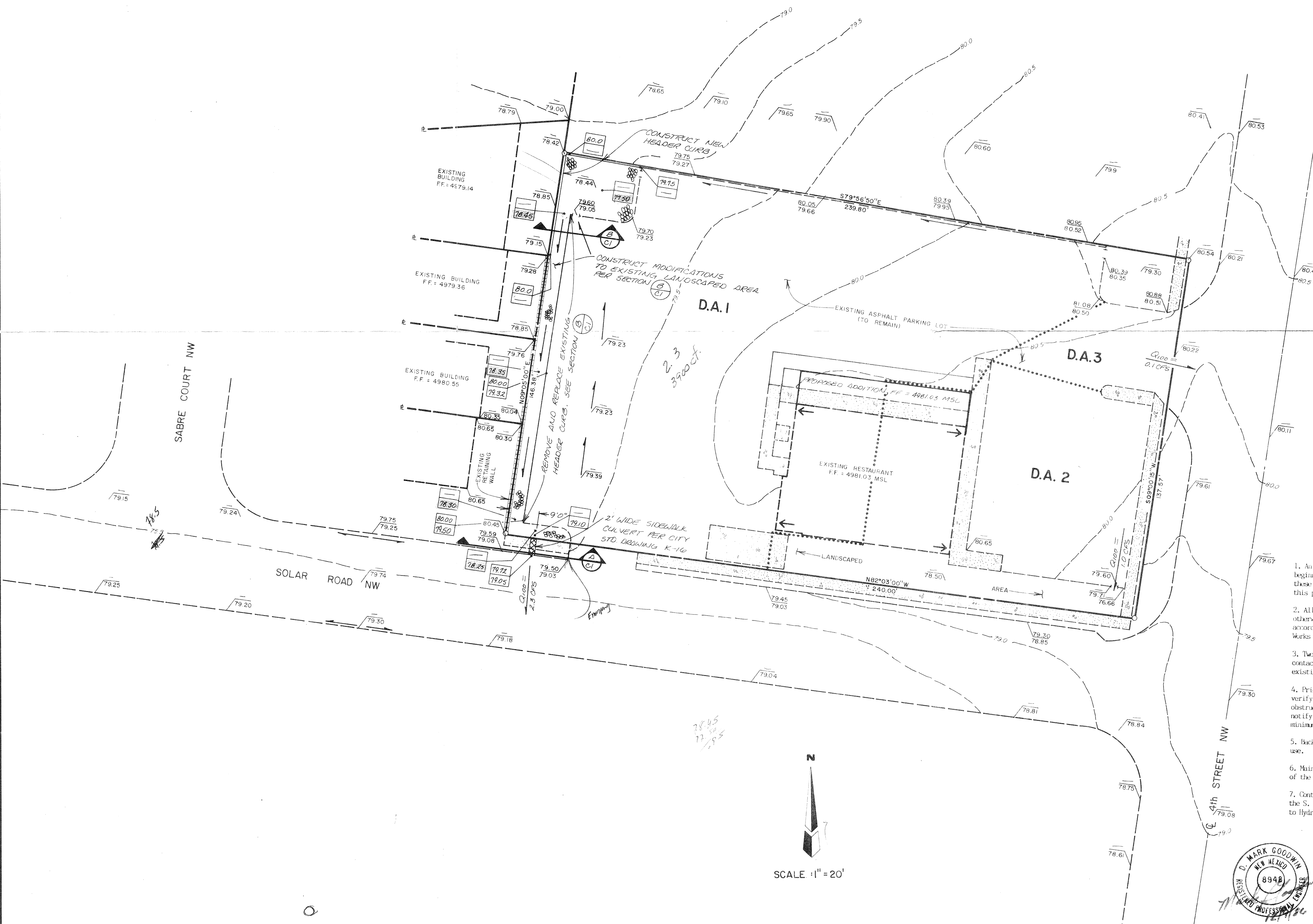
D. MARK GOODWIN & ASSOCIATES, P.A.  
CONSULTING ENGINEERS  
P.O. BOX 21307  
ALBUQUERQUE, NEW MEXICO 87154  
(505) 294-9961

Designed: MG Drawn: BG Checked: MG  
Scale: 1" = 20' Date: DEC Sheet 1 of 1



Design Approval: *Billie J. Sweeney* 1/6/87  
Inspection Approval: *David G. Sweeney* 2/2/87  
Acceptance: *David G. Sweeney* 2/25/87

RECEIVED 12/15/86



SCALE: 1" = 20'