TACO BELL AT
GIBSON

L17-D12

2 PLANS

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: L-17 DATE: January 29, 1986

PLANNING DIVISION NOS: EPC: _____ DRB: _____

SUBJECT: TACO Bell

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: lots 12-17 Block 40 Ridgecrest Addn.

APPROVAL REQUESTED:

_____ PRELIMINARY PLAT
_____ SITE DEVELOPMENT PLAN
_____ OTHER
_____ FINAL PLAT
✓ BUILDING PERMIT
_____ ROUGH GRADING

ATTENDANCE:	WHO	REPRESENTING
	Bernie J. Montoya	City Hydrology Section
	Geo. T. Rodriguez	HIMSELF

FINDINGS:

1. Approved Drainage plan required per DPM standards.
2. Replat required to remove lotlines or appropriate easements will need to be submitted for flows across lot lines.
3. If Alley is to be used for access or drainage Alley approved grades will be required before building permit is issued.
4. Site not adjacent to Flood zone nor downstream flooding indicated on Flood maps therefore free discharge to Gibson is appropriate
5. Approved alley grades will be set back to the C.O. stage. (part of # 3).

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

SIGNED:	Bernie J Montoya	SIGNED:	George L. Rodriguez
TITLE:	Engineering Assistant	TITLE:	
DATE:	1/30/86	DATE:	1-30-86

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

DRAINAGE INFORMATION SHEET

PROJECT TITLE: TACO BELL @ GIBSON S.E. ZONE ATLAS/DRNG. FILE #: L-17/D12

LEGAL DESCRIPTION: LOTS 12 THRU 17, BLOCK 40, RIDGECREST ADDITION

CITY ADDRESS: N.E. CORNER OF GIBSON & TRUMAN S.E.

ENGINEERING FIRM: VALDEZ ENGINEERING CONTACT: LEVI VALDEZ

ADDRESS: 1404 2ND ST., SANTA FE, N.M. PHONE: 505-982-8612

OWNER: TACO BELL CONTACT: AGENT - ARCHITECT

ADDRESS: C/O RICK BENNETT - ARCHITECT PHONE: 831-3950

ARCHITECT: RICK BENNETT CONTACT: SAME

ADDRESS: 3803 RIVERVIEW PL. N.W. PHONE: 831-3950

SURVEYOR: KEITH SHREEVE, L.S. #5138 CONTACT: ? CONTACT ARCHITECT

ADDRESS: _____ PHONE: _____

CONTRACTOR: ? CONTACT: _____

ADDRESS: _____ PHONE: _____

RECEIVED
MAR 17 1986
HYDROLOGY SECTION

PRE-DESIGN MEETING:

✓ YES

___ NO

✓ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 86-50 · 1/28/86

EPC 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: March 17, 1986

BY: GEORGE RODRIGUEZ

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

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

March 19, 1986

Mr. Levi Valdez
Valdez Engineering
122 Washington SE
Albuquerque, New Mexico 87108

RE: DRAINAGE PLAN FOR TACO BELL AT GIBSON AND TRUMAN (L17-D12)
RECEIVED 3/17/86

Dear Mr. Valdez:

A preliminary review of your submittal for Building Permit approval has shown that the following information is lacking for this section to begin the review process:

INFORMATION NEEDED

1. Preliminary alley grades will be required to evaluate conditions that may effect the retaining wall design. Starting at Gibson and going about 170' along that alley, we will need a profile showing existing grades along with the bottom of retaining wall grade.

2. Location and direction of roof-drains.

3. Also, building permit will not be issued until the approved filed copy of the replat is submitted for our records.

4. Approved alley grades will be withheld until the C.O. process.

Please provide this information so that we may process your request as expediently as possible.

Cordially,

Bernie J. Montoya

Bernie J. Montoya, C.E.
City Design/Hydrology Section

BJM:mk

DRAINAGE INFORMATION SHEET

PROJECT TITLE: TACO BELL (GIBSON AND TRUMAN) ZONE ATLAS/DRNG. FILE #: L-17-D-12

LEGAL DESCRIPTION: LOT 12-A, BLOCK 40, RIDGECREST ADDITION

CITY ADDRESS: 4901 GIBSON S.E., ALBUQUERQUE, N.M.

ENGINEERING FIRM: VALDEZ ENGINEERING CONTACT: GEORGE RODRIGUEZ

ADDRESS: C/O 122 WASHINGTON, S.E. PHONE: 266-3830

OWNER: ROBERT ALVARDO CONTACT: SAME

ADDRESS: 1266 SANTA FE DRIVE PHONE: 303-629-0783
DENVER, COLO. 80204

ARCHITECT: RICK BENNETT CONTACT: 831-3950

ADDRESS: 3803 RIVERVIEW PL. N.W. PHONE: RICK BENNETT
LLOYD., N.M. 87110

SURVEYOR: KEITH SHREEVE, L.S. 5138 CONTACT:

ADDRESS: ? PHONE:

CONTRACTOR: VENTURA CONSTRUCTION CONTACT: ROBERT ALVARADO

ADDRESS: P.O. BOX 4366 PHONE: 303-629-0783
DENVER, COLO. 80204

PRE-DESIGN MEETING:

✓ YES

___ NO

___ COPY OF CONFERENCE SHEET PROVIDED

RECEIVED
JUN 16 1986
HYDROLOGY SECTION

DRB NO. ___

EPC NO. ___

PROJ. NO. ___

RECEIVED
JUN 16 1986
HYDROLOGY SECTION

TYPE OF SUBMITTAL:

✓ DRAINAGE REPORT

___ DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

Resubmittal

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: JUNE 16, 1986

BY: George L. Rodriguez

FILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

June 16, 1986

George Rodriquez
Valdez Engineering
122 Washington, SE
Albuquerque, New Mexico 87108

RE: DRAINAGE PLAN FOR TACO BELL @ GIBSON & TRUMAN
(L-17/D12) ENGINEER'S STAMP DATED JUNE 16, 1986

Dear George:

Based on the information provided on your June 16, 1986 resubmittal, the above referenced drainage plan is approved for building permit.

Please be advised that final Certificate of Occupancy will not be released until an approved copy of the alley grades is submitted to our office.

Please attach a copy of this approved drainage plan to the construction sets before Hydrology sign-off.

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

Cordially,

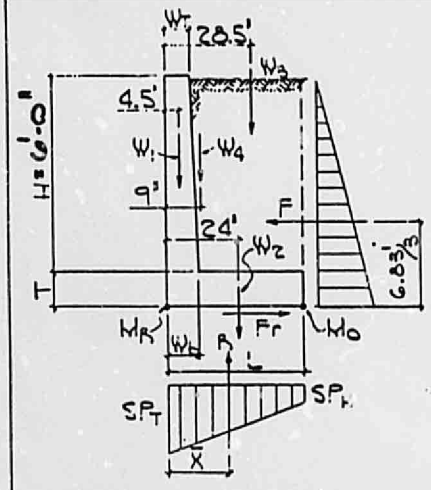
Bernie J. Montoya

Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj

RETAINING WALL

4901 GIBSON SE



GIVEN:

H	=	6'-0"
L	=	4'-0"
T	=	10"
W_T	=	8"
W_b	=	10"

RECEIVED
JUN 16 1986
HYDROLOGY SECTION

EFP = 30 p.c.f

CONCRETE f'c = 2000 p.s.i.

REINF. fs = 20,000 p.s.i

$F = \frac{30 \times 6.83^2}{2} = 700^{\#}$

$M_o = \frac{700 \times 6.83}{3} = 1595^{'\#}$

WEIGHT OF STEM = W_1	$= \frac{8" + 10"}{2 \times 12} \times 150^{\#} \times 6'$	=	675.0#
WEIGHT OF FTG. = W_2	$= 150^{\#} \times 4.0 \times .83$	=	500.0#
WEIGHT OF SOIL = W_3	$= \frac{48" - 9"}{12} \times 6' \times 100^{\#}$	=	1950.0#
STEEL FRICTION = W_4	$= \frac{6^2 \times 30}{2 \times 3}$	=	180.0#
TOTAL WT. = W		=	3305.0#

$M_R = 675 \times \frac{4.5'}{12} + 500 \times \frac{24'}{12} + 1950 \times \frac{28.5'}{12} + 180 \times \frac{9'}{12}$

$M_R = 6019.4^{'\#}$

OVERTURN. RATIO $= \frac{6019.4}{1595} = 3.77 > 1.50$ ✓

NET M $6019.4^{'\#} - 1595^{'\#} = 4424.4^{'\#}$

$= \frac{4424.4}{3305.0} = 1.339'$

ALLOWABLE $1/3 = \frac{4.00'}{3} = 1.333' < 1.339'$ ✓

$1.339' - 0.661'$

SECTION e

STATE OF NEW MEXICO
REGISTERED ARCHITECT

FOOTING DESIGN :

$e = 0.661'$ $\quad W = 3305.0^{\#}$

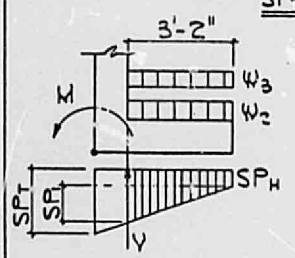
$Me = 0.661' \times 3305^{\#} = 2185.1^{\#}$

FTG. AREA $= 4.00'^2$

SECTION MODULUS $= \frac{1' \times 4.00^2}{6} = 2.667'^3$

SOIL PRESSURE $= \frac{3305^{\#}}{4.00} \pm \frac{2185.1^{\#}}{2.667} = 826.25 \pm 819.4$

$SP_T = 1645.6$ p.s.f. $\qquad SP_H = 6.9$ p.s.f.



UNIF. LD. $= 600^{\#} + 125^{\#} - 6.9^{\#} = 718.1^{\#}/FT.$

$SP_1 = \frac{1645.6 - 6.9}{4.0'} \times 3.17 = 1298.7$ p.s.f.

$M = \frac{718.1 \times 3.17^2}{2} - \frac{1298.7 \times 3.17}{2} \times \frac{3.17}{3}$

$M = 3601.2 - 2171.0 = 1430.2'^{\#}$

$V = 3.17' \times 718.1^{\#} - \frac{1298.7 \times 3.17'}{2}$

$V = 2274.2 - 2056.5 = 217.7^{\#}$

$d = 10" - (2" + .5 \times .5) = 7.75"$

$a = 1.13$

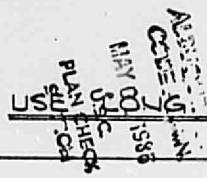
$v = \frac{217.7}{12 \times .89 \times 7.75} = 2.63$ p.s.i < 54 p.s.i ✓

$A_s = \frac{1.430'^K}{1.13 \times 7.75} = 0.16$ SQ. IN./FT.

USE #4 @ 9" o.c.

MIN. $A_s = 10 \times 48 \times .0012 = 0.576$

USE MIN. REINF. = 3-#4's



STEM DESIGN AT TOP OF FTG. :

$V = \frac{30 \times 6^2}{2} = 540.0^{\#}$

$M = \frac{540^{\#} \times 6'}{3} = 1080'^{\#}$; $d = 10' - (2 + .5 \times .5) = 7.75'$; $a = 1.13$

$f = \frac{540^{\#}}{12 \times .85 \times 7.75} = 6.52$ p.s.i $<$ 54.0 p.s.i

$A_s = \frac{1.08}{1.13 \times 7.75} = 0.1233$ SQ. IN. ; MIN. $A_s = 10 \times 12 \times .0012 = 0.144$ SQ. IN.

USE #5 @ 16" o.c. VERT.
#4 @ 24" o.c. HORIZ.

TOTAL REINF. = 0.15 + 0.10 = 0.25 SQ. IN.

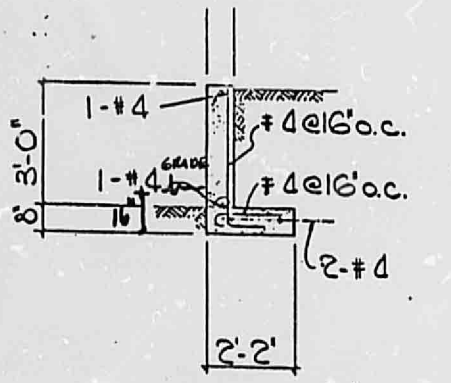
SLIDING :

$W = 3305.0^{\#}$ $F = 700.0^{\#}$

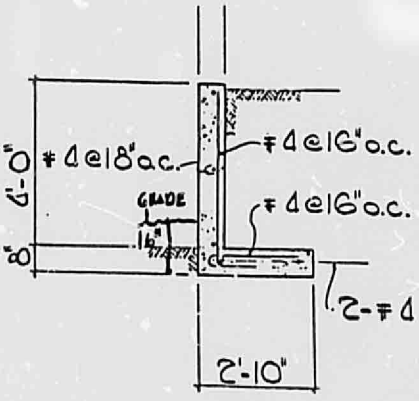
$Fr = \frac{700.0}{3305.0} = 0.212 < 0.40$ ✓

ALBUQUERQUE
CODE ADMIN.
MAY 01 1985
U.B.C.
PLAN CHECK
SECTION

NEW MEXICO
REGISTERED P.
ARCHITECT



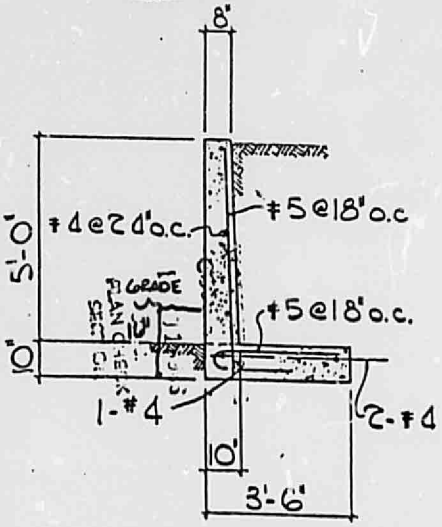
E.F.P. = 30 p.c.f.
Section 2.1.3

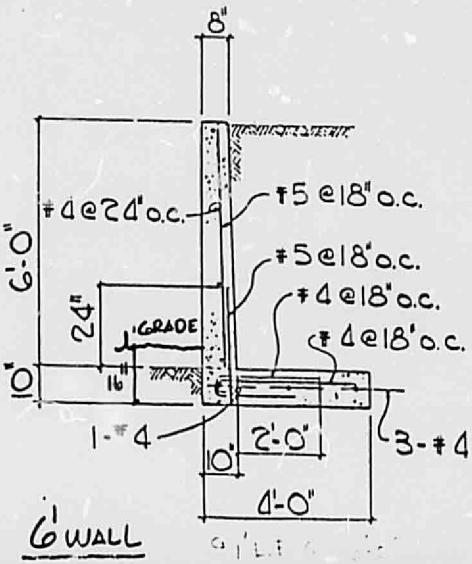


E.F.P. = 30 p.c.f.
Section 2.1.4

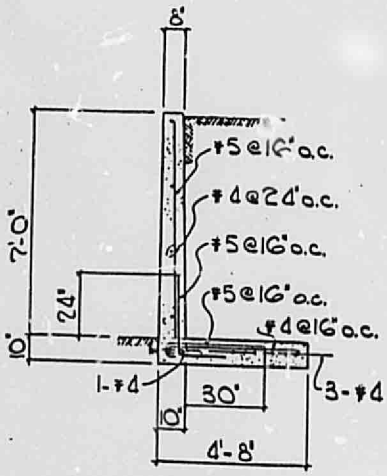
① STEP FOOTING & WALL AS SHOWN ON PLAN

② SEE CALCS. ATTACHED MAX CONDITION

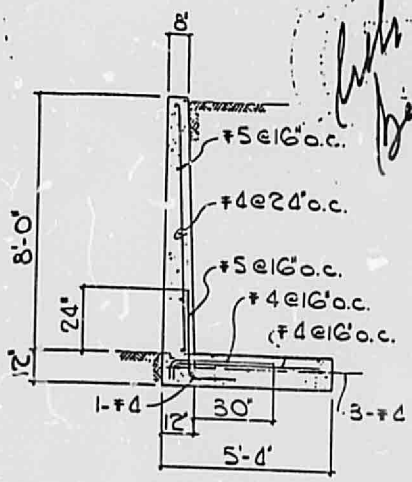




6' WALL



E.F.P. = 30 p.c.f.
Section 2.1.7

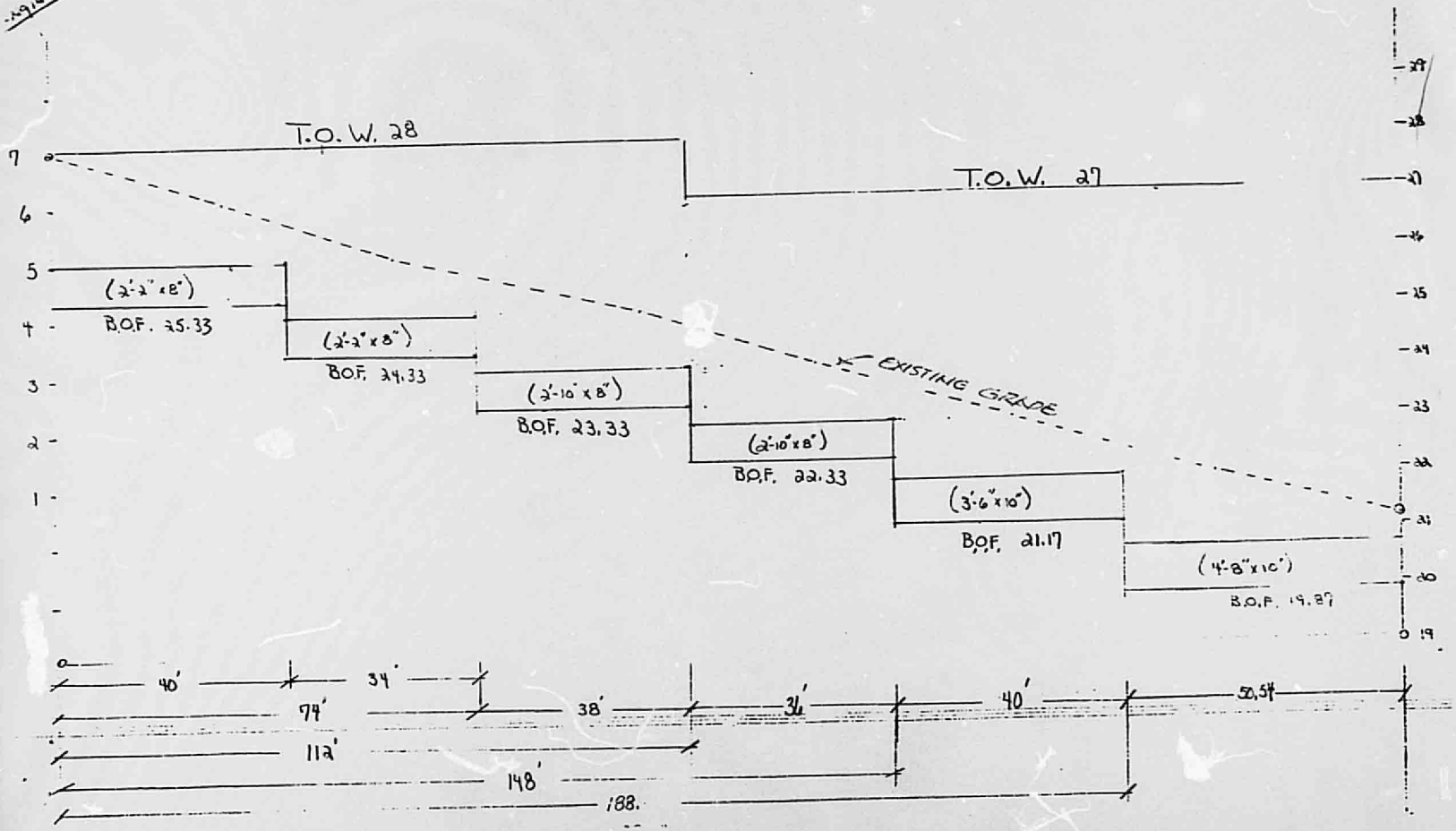


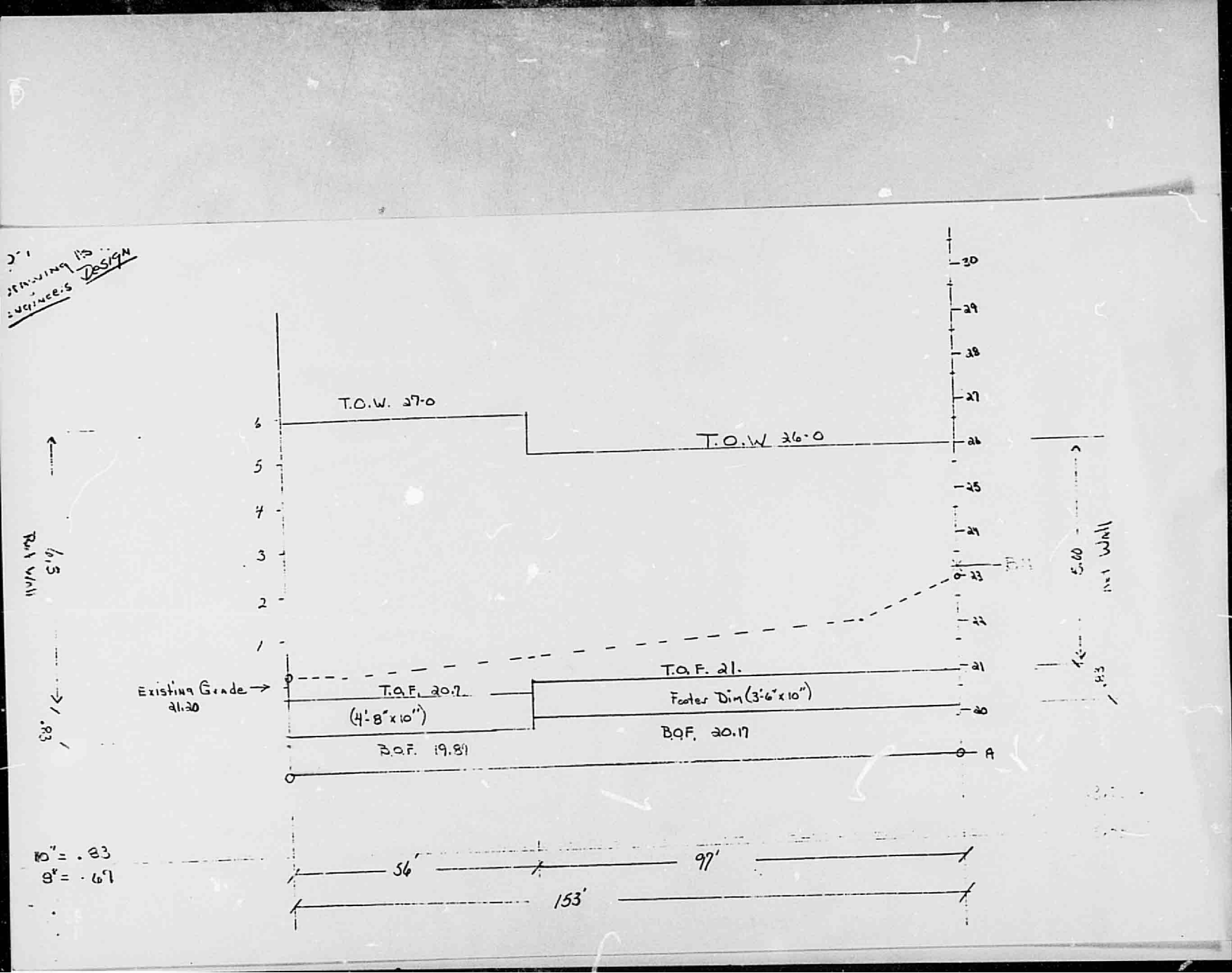
E.F.P. = 30 p.c.f.
Section 2.1.8

ALBUQUERQUE
CODE ADMIN.
MAY 01 1986
U.B.C.
PLAN CHECK
SECTION

10 = .93
B = .67

27-52
MOVING TO THE
ALIGNMENT DESIGN




T.O.W. 27-0
T.O.W 26-0
T.O.F. 21.
T.O.F. 20.2
(4'-8"x10")
Footer Dim (3'-6"x10")
B.O.F. 20.17
B.O.F. 19.81
Existing Grade
21.30
56'
97'
153'
30
29
28
27
26
25
24
23
22
21
20
A