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

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: H19 DATE: 7-10-85

PLANNING DIVISION NOS. EPC: _____ DRB: _____

SUBJECT: Houten Office Building

LEGAL DESCRIP.: Wyoming & Montreal

APPROVAL REQUESTED

_____ PRELIMINARY PLAT _____ FINAL PLAT
_____ SITE DEVELOPMENT PLAN X BUILDING PERMIT
_____ ROUGH GRADING

| | WHO: | REPRESENTING: |
|---|---|---|
| ATTENDANCE: | John Thorne | |
| | Carlos Montoya | |
| | | |
| | | |

___ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.

X Approved Drainage Plan/Report required for Final Plat and/or Building Permit sign-off.

___ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: ① Drainage plan per DPM ② Free discharge to street allowable because - ③ No flooding downstream ④ minimal impact

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: | Carlos A Montoya | SIGNED: | John Thorne |
| TITLE: | | TITLE: | Project Director |
| DATE: | 7-10-85 | DATE: | |

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

## DRAINAGE INFORMATION SHEET

PROJECT TITLE: Hooten Office Bldg. ZONE ATLAS/DRNG. FILE #: H-19/D34

LEGAL DESCRIPTION: Lots 3, 4, 5 and a protion of 6, Block 26, Inez addition

CITY ADDRESS: 2033 Wyoming Blvd. N.E.

ENGINEERING FIRM: FMBA CONTACT: Bob Sheppard

ADDRESS: 5608 Zuni S.E. PHONE: 268-6783

OWNER: Hooten-Stahl CONTACT: Bill Hooten

ADDRESS 2051 Wyoming Blvd. N.E. PHONE: 296-5591

ARCHITECT: FMBA CONTACT: Joe Almers

ADDRESS: 5608 Zuni S.E. PHONE: 268-6783

SURVEYOR: S. R. Jr. [illegible]/Associates CONTACT: Tom Romero

ADDRESS: 2[illegible]8 12th Street N.W. Suite B PHONE: 345-2733

CONTRACTOR: CONTACT:

ADDRESS: PHONE:

RECEIVED
SEP 27 1985
HYDROLOGY SECTION

PRE-DESIGN MEETING:

X YES

____ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 85-390-1

EPC NO.

PROJECT NO. H-19

TYPE OF SUBMITTAL:

X DRAINAGE REPORT

X DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAIN. PLAN

X GRADING PLAN

____ EROSION CONTROL PLAN

____ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL

____ PRELIMINARY PLAT APPROVAL

____ SITE DEVELOPMENT PLAN APPROVAL

____ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

____ FOUNDATION PERMIT APPROVAL

____ CERTIFICATE OF OCCUPANCY APPROVAL

____ ROUGH GRADING PERMIT APPROVAL

____ GRADING/PAVING PERMIT APPROVAL

OTHER_____ (SPECIFY)

DATE SUBMITTED:_____

BY:_____

Rev. 11/84

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

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

October 1, 1985

Bob Sheppard
Hooten-Stahl
2051 Wyoming Blvd. NE
Albuquerque, NM 87112

REF: HOOTEN OFFICE BLDG. (H19-D34)

Dear Mr. Sheppard:

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. Off-site flows - quantification and/or location or treatment.
2. Approved copy of replat must be in our files before building permit is released.
3. Drainage facilities with City R/W document must be submitted to City Design for approval.

Plan Drawing:

1. Vicinity map within plan drawing.
2. Bench Mark description/location, city Bench Mark used to design grades and set TBM.
3. Existing City top of curb and flow line elevations on or adjacent to site along Wyoming Blvd.
4. Erosion Control Plan required for duration of construction. What do you propose as far as erosion control.

Please provide this information so that we may process your request as expedientl[illegible]s possible.

Cordially,

/Bernie J. Montoya
City Design/Hydrology Section

BJM/cl

# DRAINAGE INFORMATION SHEET

PROJECT TITLE: HOOPER STAHL OFFICE BLDG. ZONE ATLAS/DRNG. FILE #: H19-D34

LEGAL DESCRIPTION: TRACT "A", BLOCK 26, INEZ SUBDIVISION

CITY ADDRESS: 2033 WYOMING N.E.

ENGINEERING FIRM: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: FMBA CONTACT: BOB SHEPARD

ADDRESS: 5608 ZUNI S.E. PHONE: 2686783

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

RECEIVED
OCT 16 1985
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES

___ NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

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: _____

BY: _____

flatow
moore
bryan &
associates

william jette
leon ross
rusty shaffer
wayne andrews
jon moore
robert mc cabe
tobias flatow

ARCHITECTS
ENGINEERS
PLANNERS

5608 zuni s.e.
albuquerque
new mexico
(505) 266-6783

mailing address
p.o. box 8266
albuquerque
new mexico 87198

October 16, 1985

RECEIVED
OCT 16 1985
HYDROLOGY SECTION

City of Albuquerque
Design Hydrology Section
123 Central, N.W.
Albuquerque, New Mexico 87102

Attention: Bernie Montoya

Re: Hooten Office Building (H19-D34)

Dear Bernie:

In reply to your letter of October 1, 1985, the following may be added to the drainage report. They are in the same order as the items in your letter.

Information needed:

1. Off-site flows are minimal. They are generated from the adjoining paved parking lot to the north and are directed toward Wyoming Blvd. The flows will continue to Wyoming across the new pavement in the same manner they now cross the unpaved portion.

2. Approved copy of the replat is being prepared and will be forwarded for your files before the building permit is sought.

3. Drainage facilities have been submitted to the City Engineer for construction in the right-of-way.

Plan Drawing:

1. Vicinity map is on the drawing. Sheet C-2.

2. City bench mark information has been placed on the drawing.

3. Existing curb and flow line elevations have been shown on the drawing.

4. Erosion control during construction will be provided by constructing the retention pond and appurtenances at the beginning of the project. A temporary earth berm will be constructed along Wyoming Blvd. to control sheet flow until permanent paving is in place.

We are sending a new submittal of Sheet C-2. Please call me if further information is required.

Sincerely,

Flatow, Moore, Bryan & Associates

Bob Sheppard

Bob Sheppard

BS:jss
PP.4/38

copy: FMBA File C-2a

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

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

October 18, 1985

Mr. Bob Sheppard
FMBA
P.O. Box 8266
Albuquerque, NM 87198

REF: DRAINAGE PLAN FOR HOOTEN STAHL OFFICE BUILDING (H19-D34)
RECEIVED OCTOBER 16, 1985

Dear Mr. Sheppard:

Based on the information provided on your October 16, 1985 submittal, we will need a revision date with engineer's stamp on the plan drawing before approval is granted.

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

Sincerely,

Carlos A. Montoya
City/County Flood Plain Admin.

CAM/BJM/cl

DRAINAGE INFORMATION SHEET

PROJECT TITLE: HOOTEN STAHL OFFICE ZONE ATLAS/DRNG. FILE #: H-19-Z034

LEGAL DESCRIPTION: TRACT "A" INEZ SUBDIVISION BLOCK 26

CITY ADDRESS: 2033 WYOMING N.E.

ENGINEERING FIRM: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: FLATOW MOORE BRYAN CONTACT: BOB SHEPHERD

ADDRESS: 5608 ZUNI SE. PHONE: 2686783

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

RECEIVED
OCT 23 1985
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES

___ NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

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: 10/23/85

BY: JOE ELMERS

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

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

October 28, 1985

Mr. Bob Sheppard
FMBA
P.O. Box 8266
Albuquerque, NM 87198

REF: REVISED DRAINAGE PLAN FOR HOOTEI STAHL OFFICE BUILDING (H19-D34)
REVISION DATE 10/11/85

Dear Mr. Sheppard:

Based on the information provided on your October 23, 1985 resubmittal, the above referenced drainage plan is approved for Building Permit.

Please be advised the the Building Permit will not be issued until an approved filed copy of the replat has been submitted to our office for our files.

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

Sincerely,

Carlos A. Montoya, PE
City/County Flood Plain Admin.

CAM:BJM:mrk

## DRAINAGE REPORT FOR HOOTEN OFFICE BUILDING

The site is Lots, 3, 4, 5, and the northerly portion of 6, Block 26, Inez Addition. It is located on Zone Atlas Map H-19. Wyoming Boulevard abuts the property on the east (See Plate 1). It is an in-fill development as the properties north and south are fully developed. The site is not in a flood zone. Existing slope is to the southwest at 2.15%.

The calculations will analyze the 100 year and 10 year design storms. The procedure for estimating flow will be as outlined in the Development Process Manual, Volume 2, Chapter 22.

Basis of Design:

A (Area) = 0.65 acres

Soil Classification - Embudo. SCS Group - B

P = 2.4" for 100 year storm

P = 1.58" for 10 year storm

$T_c = 0.0078\ L^{.77}/S^{.385}$

$i = 6.84\ t_c^{-.51}\ (P)$

$Q = CiA$

$S = \frac{1000}{CN} - 10$

$R.O. = (P - 0.2S)^2/P + 0.8S$

Volume = A (sf) x R.O./12

Existing Conditions:

C = 0.34 (0% impervious)

$T_c = 0.0078\ (260^{.77})/0.0215^{.385} = 2.5$ min. Use 10 min.

$i = 6.84 \times 10^{-.51} \times 2.4 = 5.07$ for 100 yr. storm

$i = 5.07 \times 0.657 = 3.33$ for 10 yr. storm

$Q_{100} = 0.34 \times 5.07 \times 0.65 = 1.12$ cfs

$Q_{10} = 0.34 \times 3.33 \times 0.65 = 0.74$ cfs

CN = 66

S = 5.15

R.O. = 0.29" - 100 yr. storm.

$V_{100} = 0.29 \times 43{,}560 \times 0.65/12 = 685$ cf

R.O. = 0.05" - 10 yr. storm

$V_{10} = 0.05" \times 43{,}560 \times 0.65/12 = 120$ cf

Developed Conditions:

The site will be 95% hardsurfaced. 63% of this area, which includes the building, will surface drain to Wyoming Boulevard. 32% or 0.21 acres will be directed to a retention pond and pumped to Wyoming Boulevard. Pond capacity will be such that, in the event of pump failure, the volume generated by the 100 year storm for this basin will be contained. Overflow will be directed southward along the line of existing natural drainage. See Attachment C-2.

Surface Flow Calculations:

A = 0.39 ac (63% of hard surface)

C = 0.92 (for 95% hard surfaced)

$t_c = 0.0078\ (230^{.77})/0.03^{.385} = 2$ min. Use 10 min.

i = 5.07 for 100 yr. storm.

i = 3.33 for 10 yr. storm.

$Q_{100} = 0.92 \times 5.07 \times 0.39 = 1.8$ cfs

$Q_{10} = 0.92 \times 3.33 \times 0.39 = 1.2$ cfs

Composite CN = 96

S = 0.42

R.O. = 1.96" - 100 yr. storm

R.O. = 1.17" - 10 yr. storm

$V_{100}$ = 1.96 x 0.39 x 43,560/12 = 2,780 cf

$V_{10}$ = 1,660 cf

12" wide sidewalk culvert

A = 0.56 sf

S = 0.0208'/ft.

= 0.27

$$Q = 0.56 \times \frac{1.486}{0.013} \times 0.418 \times 0.144 = 3.8 \text{ cfs} > 1.8 \text{ cfs}$$

Pond Calculations:

A = 0.21 acres

C = 0.92

$Tc = 0.0078\ (300^{.77})/0.0208'^{.385}$ = 2.8 min. Use 10 min.

i = 5.07 for 100 yr. storm

i = 3.33 for 10 yr. storm

$Q_{100}$ = 0.92 x 5.07 x 0.21 = 1.0 cfs

$Q_{10}$ = 0.6 cfs

Composite CN = 96

S = 0.42

R.O. = 1.96" - 100 yr. storm

R.O. = 1.17" - 10 yr. storm

$V_{100}$ = 1.96 x 0.21 x 43,560/12 = 1,500 cf

$V_{10}$ = 890 cf

Pond area = 256 sf (See Attachment C-2)

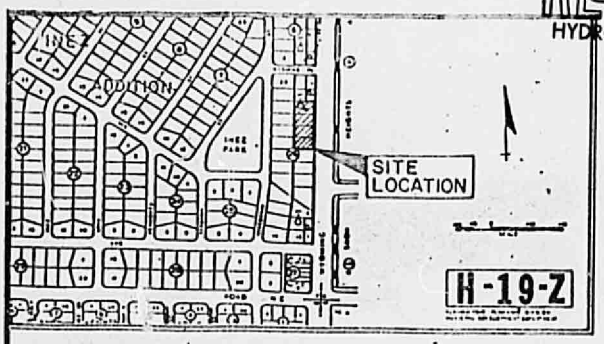
Pond depth = 1,500/256 = 5.86'. Use 6'.

Pump discharge will be directed thru the curb at the rate of 1 cfs.

# CITY OF ALBUQUERQUE

## DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

RECEIVED
JUN 26 1986
HYDROLOGY SECTION




VICINITY MAP 1" = 800'

Legal Description: Lots 3, 4, 5 and the northerly portion of 6, Block 26, Inez Addition, Bernalillo Co. Albuquerque, NM.

Bench Mark: Northeast quadrant of Wyoming and Indian School N.E. Brass cap 7H20 set in hole in sidewalk. Elevation = 5371.077

Temporary Bench Mark: Square cut in top of curb at site. Elevation = 5377.10

DESCRIPTION OF WORK

FACILITY #1 - SIDEWALK CULVERT LOCATED @ 8'-0" FROM SOUTH PROPERTY LINE

FACILITY #2 - CURB PENETRATION LOCATED @ 11'-0" FROM SOUTH PROPERTY LINE

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
MAX FLATOW
2961

NOTICE TO CONTRACTOR.

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Interium Standard Specification - Public Works Construction - 1985.
3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to arterial street use.

HOPKINS CONCRETE

| APPROVALS | NAME | DATE |
|---|---|---|
| A.C.E./DESIGN | | 6/26/86 |
| INSPECTOR | | |

HG-D54 E-136

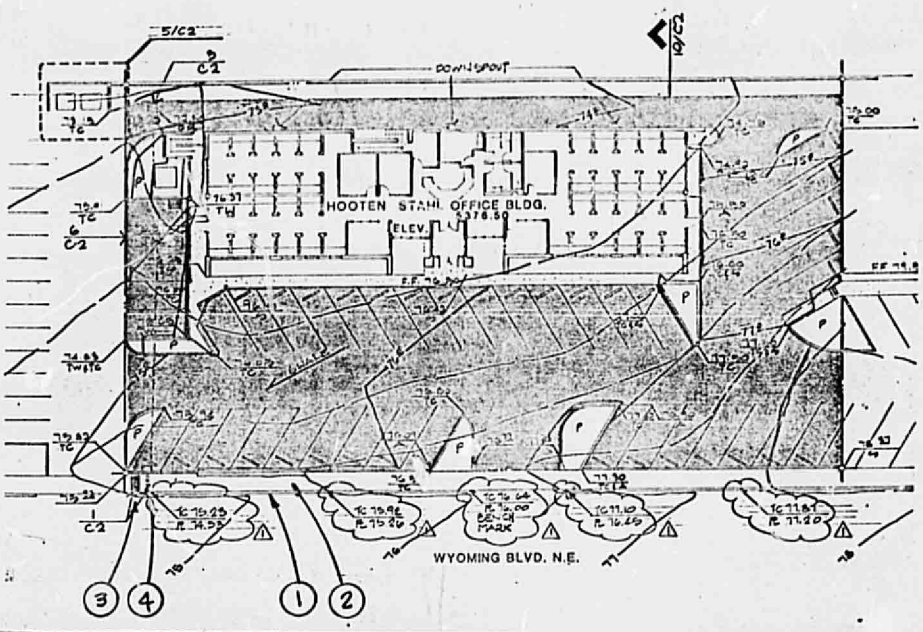
TITLE: 4" CURB PENETRATION SIDEWALK CULVERT

HOOTEN OFFICE BUILDING

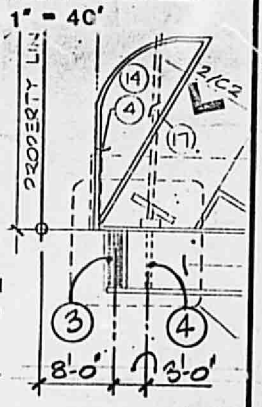
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT

# CITY OF ALBUQUERQUE

## DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY




1" = 40'




NOTES:

1. EXISTING CURB & GUTTER,
2. EXISTING SIDEWALK, 6'-0" WIDE
3. SIDEWALK CULVERT PER CITY STANDARD K-16, FACILITY # 1
4. 4" PVC DRAIN LINE THRU CURB PER CITY STANDARD K-15. FACILITY # 2

LEGAL DESCRIPTION: LOTS 3, 4, 5 AND THE NORTHERLY PORTION OF 6, BLOCK 26, INEZ ADDITION, BERNALILLO CO. ALBUQUERQUE, NM.

BENCH MARK: NORTHEAST QUADRANT OF WYOMING AND INDIAN SCHOOL N.E. BRASS CAP 7H20 SET IN HOLE IN SIDEWALK. ELEVATION = 5371.077

TEMPORARY BENCH MARK: SQUARE CUT IN TOP OF CURB AT SITE. ELEVATION = 5377.10

REGISTERED PROFESSIONAL ENGINEER STATE OF New Mexico 2961 MAX FLATOW

HOPKINS CONCRETE

E-136

# CITY OF ALBUQUERQUE

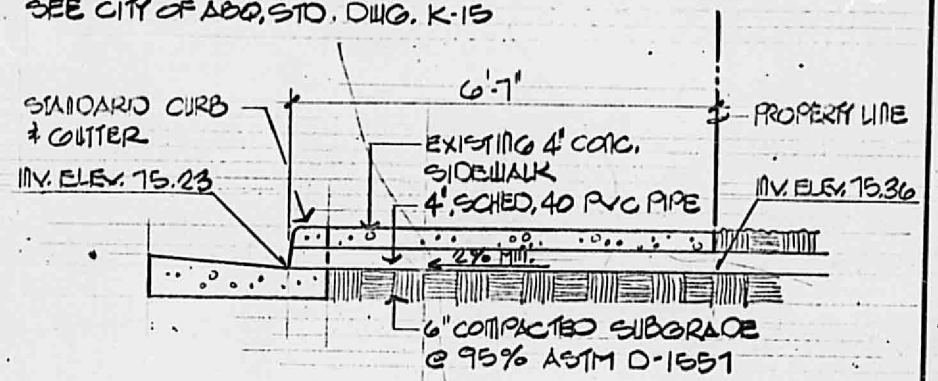
| APPROVALS | ENGINEER | DATE | TITLE: 4" CURB PENETRATION SIDEWALK CULVERT |
|---|---|---|---|
| A.C.E. DESIGN | | | HOOTEN OFFICE BUILDING |
| WATER RESOURCES | R.R. | | 2033 WYOMING N.E. |
| CITY ENGINEER | | | PROJECT NO. / MAP NO. H 10 |

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

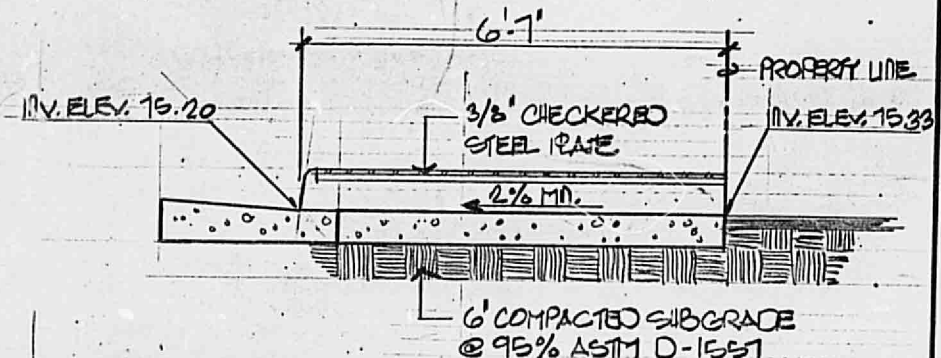
# CITY OF ALBUQUERQUE

## DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

NOTE: FOR CONSTRUCTION DETAILS
SEE CITY OF ABQ. STD. DWG. K-15




SECTION A
1/2" = 1'-0"




NOTE: FOR CONSTRICTION DETAILS
SEE CITY OF ABQ. STD. DWG. K-16

SECTION B
1/2" = 1'-0"

LEGAL DESCRIPTION: LOTS 3, 4, 5 AND THE NORTHERLY PORTION OF 6, BLOCK 26, INEZ ADDITION, BERNALILLO CO. ALBUQUERQUE, NM.

BENCH MARK: NORTHEAST QUADRANT OF WYOMING AND INDIAN SCHOOL N.E. BRASS CAP 7H20 SET IN HOLE IN SIDEWALK. ELEVATION = 5371.077

TEMPORARY BENCH MARK: SQUARE CUT IN TOP OF CURB AT SITE. ELEVATION = 5377.10

REGISTERED PROFESSIONAL ENGINEER
STATE OF
Max Flaton
2961
NEW MEXICO
MAX FLATON

E-136

# CITY OF ALBUQUERQUE

| APPROVALS | ENGINEER | DATE | TITLE: 4" CURB PENETRATION SIDEWALK CULVERT HOOTEN OFFICE BUILDING 2033 WYOMING N.E. |
|---|---|---|---|
| A.C.E. DESIGN | | 10/23/85 | |
| WATER RESOURCES | | | PROJECT NO. MAP NO. H 19 |
| CITY ENGINEER | | | DRAWING NO. 2274 SHEET 2 OF 5 |

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