



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

October 8, 1985

Mr. Frank Lovelady
Lovelady & Associates
7408 Morrow Road NE
Albuquerque, NM 87110

REF: DRAINAGE PLAN FOR BLAKES LOTA BURGER (J13-D30) ENGINEER'S STAMP
DATED 9/30/85

Dear Frank:

Based on the information provided on your October 1, 1985 submittal,
the above referenced drainage plan is approved for Building Permit.

Please attach a copy of this approved drainage plan along with the
appropriately approved "Construction Within City R/W" document to the
construction sets before Hydrology will sign-off.

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

Sincerely,

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

CAM:BJM:mrk

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

September 26, 1985

Frank Lovelady
Lovelady & Assoc.
7408 Morrow Rd. NE
Albuquerque, NM 87110

REF: BLAKES LOTA BUKGER (J13-D30)

Dear Mr. Lovelady:

A preliminary review of your submittal for final plat and building permit approval has shown that the following information is lacking for this section to begin the review process:

Information Needed:

1. Analysis of downstream capacity.
2. Approved copy of replat required before building permit is issued.

Plan Drawing:

1. Bench Mark description/location and elevation.
2. TBM to full mean level designation.
3. Location and/or direction of flow for roof-drains.
4. Please identify if Carson Rd. is designated as a private access, if not, approved street grades will be required.

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

Cordially,

Bernie J. Montoya
City/Design/Hydrology Section

BJM/cl

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

RESUBMITTAL

PROJECT TITLE: Blakes Lotaburger ZONE ATLAS/DRNG. FILE #: 513/D30
 LEGAL DESCRIPTION: Lot A, Pueblo Bonito Addition
 CITY ADDRESS: 777 Rio Grande Blvd. NW

ENGINEERING FIRM: Lavelady & Associates CONTACT: Frank Lavelady

ADDRESS: 7408 Marrow Rd NE PHONE: _____

OWNER: Blakes Lotaburger CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: Ken Hovey Design Group CONTACT: Ken Hovey

ADDRESS: 335 Jefferson SE Suite B PHONE: 255-9400

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

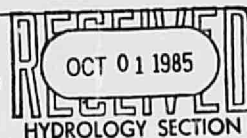
ADDRESS: _____ PHONE: _____

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: October 1, 1985

BY: Frank D. Lavelady

October 1, 1985

Lovelady & Associates
7408 Morrow Road NE
Albuquerque, New Mexico 87110

City of Albuquerque
Municipal Development Department
Engineering Division
Design Hydrology Section
123 Central Avenue NW
Albuquerque, New Mexico 87102

Subject: Blakes Lotaburger - Project No. J13/D30

Gentlemen:

This is in response to the design review comments prepared by hydrology section for the subject project. I will respond to the comments in order with the same reference numbers shown in your letter. I have attached a copy of the review comments for reference.

Under the heading "INFORMATION NEEDED":

Item #10. Analysis of downstream capacity. Please find a copy of the downstream analysis attached.

Item #11. Approved copy of replat required before building permit is issued. Please find a copy of the approved replat attached.

Under the heading "PLAN DRAWING":


Item #5. Bench Mark description/location and elevation. City Datum information has been added to the drawing in the lower left hand corner.

Item #6. TBM to full mean level designation. Done. See revised keyed note #3 on the drawing.

Item #12. Location and/or direction of flow for roof-drains. Roof drain locations have been added to the drawing.

Item #16. Please identify if Carson Road is Designated as a private access, if not, approved street grades will be required. Carson Road is a private access road and is not a dedicated public right-of-way.

Respectfully yours,


Frank D. Lovelady, PE

DOWNSTREAM ANALYSIS

LOTTABURGER SITE - PROJECT NO. J13/D30

The proposed site is located at the corner of Rio Grande Boulevard and Pueblo Bonito Court on Zone Atlas Grid No. J-13. The area is served by an existing 24-inch storm sewer system designated System No. 124. The system extends north as far as Aspen Avenue, approximately 1,200 feet. The system continues south in Rio Grande Blvd. to Chacoma Place, south in Chacoma Place to Pasquale Avenue, south in Pasquale Avenue to Laguna Boulevard, and south in Laguna Boulevard to the outfall into the Conservancy Lake.

This site is a relatively minor infill site and, for this reason, a detailed analysis of the storm sewer capacity beginning at the outfall and proceeding upstream is not warranted. There is a catch basin on the southwest corner of Rio Grande Boulevard and Pueblo Bonito Court, within a very short distance of the sidewalk culvert that drains the site. Therefore, discharge from the site will enter the storm sewer system almost immediately and the impact on downstream capacity will be relatively slight.


Signature of Engineer

September 30, 1985
Date





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

TO: Frank Lovelady
REF: Blakes Lota Burger

J13-D30

Dear Mr. Lovelady:

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

Approval Sought

- ☐ A. Sketch Plat
- ☐ B. Preliminary Plat
- ☒ C. Final Plat
- ☐ D. Site Development Plan
- ☒ E. Building Permit
- ☐ F. Rough Grading
- ☐ G. Foundation Only

Information Needed

- ☐ 1. Completed Information Sheet
- ☐ 2. Professional Engineer's Stamp with signature and Date (Revision date)
- ☐ 3. Flood Hazard
- ☐ 4. Detailed Grading Plan showing T.C. & F.L. Elevations (For Preliminary Plat and Rough Grading requests for Subdivisions)
- ☐ 5. Off-site flows - quantification and/or location or treatment.

MUNICIPAL DEVELOPMENT DEPARTMENT

C. D. Lynn Sheppard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7647

AN EQUAL OPPORTUNITY EMPLOYER

___ 6. On-site flows - quantification, discharge locations and/or treatment.

___ 7. On-site Drainage Basin delineation.

___ 8. Existing R/W or easements.

___ 9. Proposed R/W, easements (and if necessary) current plat-for lotline removal.

✓ 10. Analysis of downstream capacity.
✓ 11. ^{Plan Drawing} approved copy of replat required before building permit is issued.

___ 1. North Arrow - Scale.

___ 2. Minimum 24" x 36" plan size.

___ 3. Vicinity Map.

___ 4. Legal Description.

✓ 5. Bench Mark description/location, and elevation

✓ 6. TBM location, to full mean level designation

___ 7. Contours, spots, structures within 25' (outside) of property line.

___ 8. Existing City top of curb and flow line elevations on or adjacent to site.

___ 9. Delineation of retaining and garden walls. Both existing or proposed.

___ 10. City project number for adjacent streets or alleys being designed per requirement.

___ 11. Finished floor elevation with complete MSL designation.

✓ 12. Location and/or direction of flow for roof-drains.

___ 13. Delineation of phased construction.

___ 14. Erosion Control Plan.

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

✓ 15. ~~approved copy of replat required before building permit is issued.~~

Cordially,

✓ 16. Please identify if Carson Rd is designated as a private access, if not, approved street grades will be required.

City Design/Hydrology Section

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

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: J13-D DATE: 7/16/85
PLANNING DIVISION NOB. EPC: _____ DRB: _____
SUBJECT: Grading & Drainage Plan for Restaurant Facilities
LEGAL DESCRIP.: _____

APPROVAL REQUESTED

____ PRELIMINARY PLAT
____ SITE DEVELOPMENT PLAN
____ ROUGH GRADING
____ FINAL PLAT
____ BUILDING PERMIT

WHO:

REPRESENTING:

ATTENDANCE: Bernie J. Montoya
George Rodriguez
City Hydrology
Rodriguez & Associates

- ☒ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.
☒ Approved Drainage Plan/Report required for Final Plat and/or Building Permit sign-off.
☐ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: Free discharge to Rio Grande / Drainage Report per DPM
for PM removal by replatting or drainage easement / downstream capacity
analysis for free discharge.

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 J. Rodriguez
TITLE: Engineer / Assoc. Eng. TITLE: _____
DATE: 7/15/85 DATE: _____

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

DRAINAGE CALCULATIONS

I. REFERENCES:

- A. City of albuquerque Development Process Manual (DPM) Volume 2, Design Criteria, Chapter 22: Drainage, Flood Control, and Erosion Control.
- B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, United States Department of Agriculture, Soil Conservation Service.
- C. Floodway Flood Boundary and Floodway Map, City of Albuquerque, New Mexico, Panel 28 of 50.

II. GENERAL INFORMATION:

- A. Soil Type (Ref. B, Page 30):
Soil type is 'Af' (Aqua Loam), Hydrologic soil group 'B'.

B. Imperviousness:

Type of Surface	Existing Sq. Ft. / Acres	Area	Proposed Sq. Ft. / Acres	Area
Building roof	N/A		2250	0.052
Concrete Surfaces	N/A		535	0.012
Asphalt Surfaces	N/A		19940	0.457
Landscaping	N/A		N/A	
Undeveloped Surface	31637	0.726	8912	0.205
Site Total	31637	0.726	31637	0.726
Percent Impervious	0.0%		71.8%	

C. "C" Factor (See Ref. A, Plate 22.2 C-1):

1. Undeveloped "C" Factor = 0.34
2. Developed "C" Factor = 0.70

D. Rainfall, 100-year, 6-hour, R(6), (Ref. A, Plate 22.2 D-1):

R(6) = 2.20 inches

E. Time of Concentration, Tc:

Use a minimum value of 10 minutes for calculations.



F. Rainfall Intensity, I (See Ref. A, Plate 22.2 D-2):

$$\begin{aligned} I &= R(6) \times 6.84 \times T_c(-0.51) \\ &= 2.20 \times 6.84 \times 10(-0.51) \\ &= 4.65 \text{ in/hr} \end{aligned}$$

III. PEAK DISCHARGE:

A. Existing Conditions (Use Rational Method):

$$\begin{aligned} Q(100) &= 0.34 \times 4.65 \times 0.726 \\ &= 1.15 \text{ cfs} \end{aligned}$$

$$\begin{aligned} Q(10) &= 0.657 \times 1.15 \\ &= 0.75 \quad (\text{Ref. A, Plate 22.2 D-1}) \end{aligned}$$

B. Developed Conditions:

$$\begin{aligned} Q(100) &= 0.70 \times 4.65 \times 0.726 \\ &= 2.36 \text{ cfs} \end{aligned}$$

$$\begin{aligned} Q(10) &= 0.657 \times 2.36 \\ &= 1.55 \text{ cfs} \end{aligned}$$

IV. SIDEWALK DRAINAGE CHANNEL CAPACITY:

$$\begin{aligned} A &= 1.56 \text{ sq.ft.} \\ P &= 2.17 \text{ ft.} \\ R &= A/P = 0.72 \text{ ft.} \\ S &= 0.02 \text{ ft/ft} \\ n &= 0.013 \end{aligned}$$

By Manning's Equation:

$$\begin{aligned} Q &= \frac{1.486}{n} \times A \times R(\text{exp. } 2/3) \times S(\text{exp. } 1/2) \\ &= 20.26 \text{ cfs} \end{aligned}$$

Drainage area to discharge through channel:

$$A = 0.341 \text{ acres}$$

$$\text{Also: } C = 0.90; \text{ and } I = 4.65$$

Therefore, the peak discharge through channel (using the Rational Method) shall be:

$$\begin{aligned} Q(100) &= 0.90 \times 4.65 \times 0.341 \\ &= 1.4 \text{ cfs} \end{aligned}$$

Therefore, the drainage channel has adequate capacity to carry the maximum volume required.



V. CONSTRUCTION NOTES:

1. Two (2) working days prior to any excavation, contractor must contact line locating service at 765-1234 for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
3. All work on this project shall be performed in accordance with applicable Federal, State and Local laws, rules, and regulations concerning construction safety and health.
4. All construction within City Right-of-Way shall be performed in accordance with applicable City of Albuquerque standards and procedures.

VI. GENERAL NOTES:

City Zone Atlas Map
City Bench Mark

J-13
STA 7-J13A

VII. FLOOD INFORMATION:

Subject property is not situated within a designated 100 year flooding zone, however the entire site is located within the 500 year flood zone (as per Reference 1C).

VIII. EROSION CONTROL:

During construction phase, two (2) new drive pads shall be constructed within the City Right-of Way. The contractor shall promptly clean up any material excavated within the public Right-of Way, such that the excavated material is not susceptible to being washed down the streets.

The proposed curb within the property shall be constructed such that it prohibits any flow over the public sidewalks

IX. OFF-SITE FLOW:

There is no flow onto this site from off-site sources. Slopes west of the western property line fall away from the subject property precluding any off-site flow from this direction. An existing bar ditch along the northern property line, and existing curbs beyond the eastern and southern property lines prohibit any off-site flow from these directions.





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7044

September 26, 1985

Frank Lovelady
Lovelady & Assoc.
7408 Morrow Rd. NE
Albuquerque, NM 87110

REF: BLAKES LOTA BURGER (J13-D30)

Dear Mr. Lovelady:

A preliminary review of your submittal for final plat and building permit approval has shown that the following information is lacking for this section to begin the review process:

Information Needed:

1. Analysis of downstream capacity.
2. Approved copy of replat required before building permit is issued.

Plan Drawing:

1. Bench Mark description/location and elevation.
2. TBM to full mean level designation.
3. Location and/or direction of flow for roof-drains.
4. Please identify if Carson Rd. is designated as a private access, if not, approved street grades will be required.

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

Cordially,

Bernard J. Montoya
City/Design/Hydrology Section

BJM/cl

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Shappard, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

PROJECT TITLE: BLAKES LOTABURGER RESTAURANT ZONE ATLAS/DRNG. FILE #: 5-13/D30

LEGAL DESCRIPTION: LOT A, PUEBLO BONITO ADDITION

CITY ADDRESS: 777 RIO GRANDE BLVD. NW

ENGINEERING FIRM: _____ CONTACT: FRANK LOWELADY

ADDRESS: _____ PHONE: 883-7973

OWNER: BLAKES LOTABURGER CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: KEN HOWEY DESIGN GROUP CONTACT: KEN HOWEY

ADDRESS: 335 JEFFERSON SUITE B PHONE: 255-9400

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

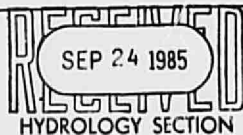
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☒ YES

☐ NO

☐ COPY OF CONFERENCE RECAP SHEET PROVIDED



DRB NO. 85 508 7/30/85

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)

RESUBMITTED FOR DATE 4

LEGAL DESCRIPTION!

DATE SUBMITTED: 9/2/85

BY: REGI RUTAB

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

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: J13-D30 DATE: 7/14/85
PLANNING DIVISION NOS. EPC: _____ DRB: _____
SUBJECT: Grading & Drainage PDP for Restaurant Facilities
LEGAL DESCRIP.: _____

APPROVAL REQUESTED

____ PRELIMINARY PLAT
____ SITE DEVELOPMENT PLAN

____ ROUGH GRADING

☒ FINAL PLAT
☒ BUILDING PERMIT

WPD:

REPRESENTING:

ATTENDANCE:

Bernie J. Montoya
George Rodriguez

City Hydrology
Rodriguez & Associates

- ____ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.
☒ Approved Drainage Plan/Report required for Final Plat and/or Building Permit sign-off.
____ Subdivision Improvements Agreement or Financial Security required.
or Pueblo Bonito Ct. NW

FINDINGS: Free discharge to Rio Grande / Drainage Report per DPM
lot fill removal by replating or drainage easement / downstream capacity
analysis for free discharge

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 Rodriguez

TITLE:

ENGINEER / ASST. TOWN

TITLE:

DATE:

7/15/85

DATE:

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

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



VICINITY MAP 1"=150'

RECEIVED
FEB 05 1986
HYDROLOGY SECTION

NT

LEGAL DESCRIPTION: LOT

PUEBLO BONITO SUBDIVISION
BERNALILLO COUNTY
FILED AUG. 1, 1985

REFERENCE CITY DATUM:

BRASS TABLET STAMPED "1-113A"
SET FLUSH WITH CURB, LOCATED
AT INTERSECTION OF RIO GRANDE BLVD. N.W.
& MOUNTAIN RD. N.W. (36.0' EAST OF E. OF RIO GRANDE
26.0' NORTH OF E. OF MOUNTAIN RD.)
3RD ORDER, ELEVATION = 4950.09'



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 Interim Standard Specifications for 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.

KATSCH ENTERPRISES

APPROVALS

NAME

DATE

TITLE:

Blake's Lotaburger
777 Rio Grande Blvd. NW
Albuquerque, N.M.

AGE DESIGN

INDICATOR

APPROVED

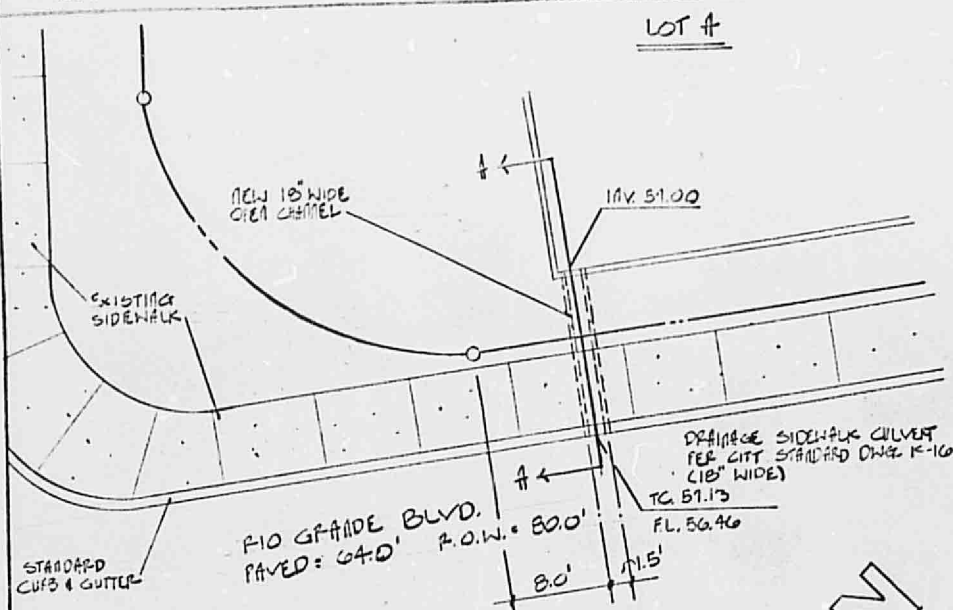
PERMIT NO. 25323

2

MAP NO. J-13

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



SOUTHEAST CORNER OF SITE

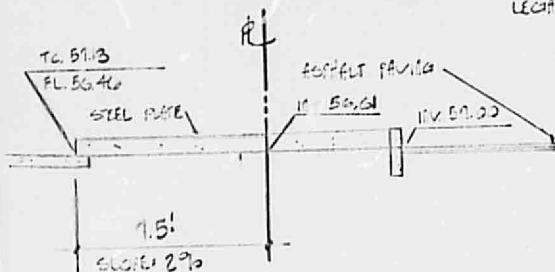
1" = 10.0'

TEMPORARY BENCHMARK - NAIL ON SOUTH SIDE OF POWER POLE,
EAST SIDE OF PROPERTY
ELEVATION = 4659.38

REFERENCE CITY DATUM: BRASS TABLET STAMPED "1-1134"
SET FLUSH WITH CURB, LOCATED
AT INTERSECTION OF RIO GRANDE BLVD. NW
& MOUNTAIN RD. NW (36.0' EAST OF C. OF RIO GRANDE
26.0' NORTH OF C. OF MOUNTAIN ROAD)
3RD CORNER, ELEVATION = 4956.09'

LEGAL DESCRIPTION: LOT 4

RESUB 80110 SUBDIVISION
BERNARDINO COUNTY



SECTION A-A

1" = 5'



E-105

KATSCH ENTERPRISES

APPROVALS

NAME

DATE

TITLE:

A.C.E./DESIGN

INSPECTOR

C.S.A./P.L.S.

Blake's Lotaburger
777 Rio Grande Blvd. NW
Albuquerque, N.M.

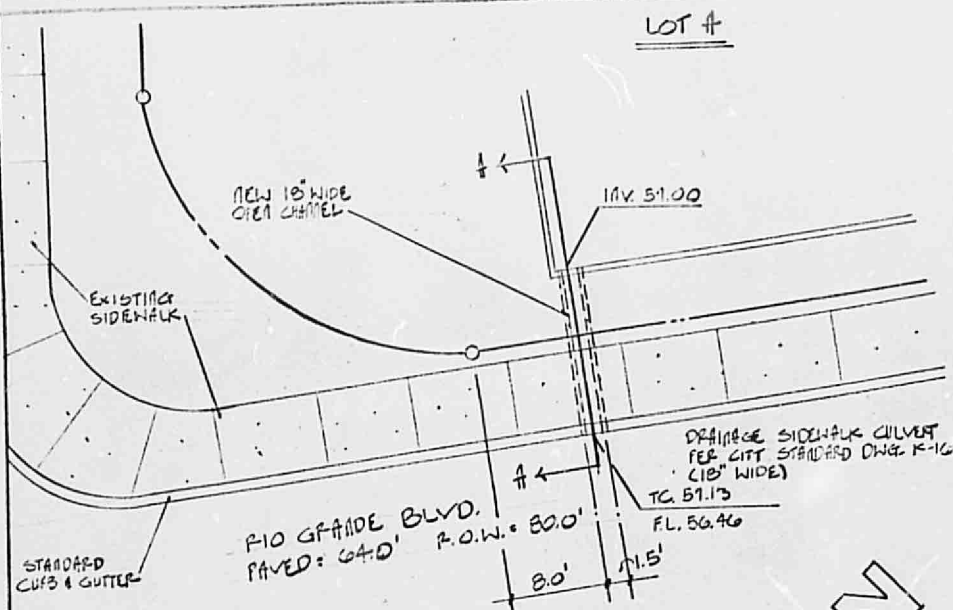
PLAN NO 25323

SHEET 2 OF 2

DATE
J-13

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



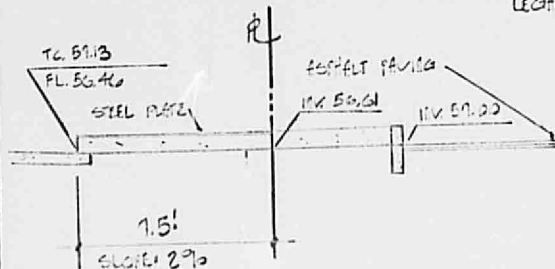
SOUTHEAST CORNER OF SITE 1"=10.0'

TEMPORARY BENCHMARK - NAIL ON SOUTH SIDE OF POWER POLE,
EAST SIDE OF PROPERTY
ELEVATION = 4059.30

REFERENCE CITY DATUM: BRASS TABLET STAMPED "1-1134"
SET FLUSH WITH CURB, LOCATED
AT INTERSECTION OF RIO GRANDE BLVD. N.W.
& MOUNTAIN RD. N.W. (36.0' EAST OF C. OF RIO GRANDE
26.0' NORTH OF C. OF MOUNTAIN ROAD)
3RD CORNER, ELEVATION = 4956.09'

LEGAL DESCRIPTION: LOT #

FEBLO BOMBO SUBDIVISION
BERNILLO COUNTY



SECTION A-A 1"=5'



E-105

KATSCH ENTERPRISES

APPROVALS

NAME

DATE

TITLE:

A.C.E./DESIGN

INSPECTOR

DATE

Blake's Lotaburger
777 Rio Grande Blvd. NW
Albuquerque, N.M.

PERMIT NO 25323

2 2

APP

0-13

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Blake's Lotaburger Restaurant ZONE ATLAS/DRNG. FILE #: J-13
 LEGAL DESCRIPTION: Lot 'A' of Plat 'A', Pueblo Bonito Addition, City of Albuquerque, N.M.
 CITY ADDRESS: 777 Rio Grande Boulevard NW

ENGINEERING FIRM: Frank Lovelady CONTACT: same
 ADDRESS: _____ PHONE: 883-7973
 OWNER: Blake's Lotaburger, Inc. CONTACT: Elwin Johnson
 ADDRESS: 3205 Richmond Drive NE PHONE: 884-2160
 ARCHITECT: The Ken Hovey Design Group CONTACT: Kelly Moe
 ADDRESS: 335 Jefferson St. SE, Suite 'B' PHONE: 255-9400 or 255-4756
 SURVEYOR: Charles T. Scannell CONTACT: same
 ADDRESS: 2108 Pajarito Rd. SW PHONE: 877-3558
 CONTRACTOR: Blake's Lotaburger, Inc. CONTACT: Elwin Johnson
 ADDRESS: 3205 Richmond Dr. NE PHONE: 884-2160

PRE-DESIGN MEETING:

☐ YES
☐ NO
☒ COPY OF CONFERENCE RECAP
 SHEET PROVIDED

DRB NO. _____
 EPC NO. _____
 PROJ. NO. J13-D

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
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☒ FINAL PLAT APPROVAL
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☐ FOUNDATION PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY APPROVAL
☐ ROUGH GRADING PERMIT APPROVAL
☒ GRADING/PAVING PERMIT APPROVAL
☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: September 4, 1985

BY: Kelly M. Moe

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

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: J13-D DATE: 7/16/85
PLANNING DIVISION NOS. EPC: _____ DRB: _____
SUBJECT: Grading & Drainage Plan for Restaurant Facilities
LEGAL DESCIP.: _____

APPROVAL REQUESTED

____ PRELIMINARY PLAT
____ SITE DEVELOPMENT PLAN

____ ROUGH GRADING

☒ FINAL PLAT
☒ BUILDING PERMIT

WHO:

REPRESENTING:

ATTENDANCE: Bernie J. Montoya
George Rodriguez

City Hydrology
Rodriguez & Associates

- ☒ Conceptual Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.
☒ Approved Drainage Plan/Report required for Final Plat and/or Building Permit sign-off.
____ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: Free discharge to Rio Grande / Drainage Report per DPM
for PM removal by replating or drainage easement / downstream capacity
analysis for free discharge.

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
TITLE: Engineer / Assistant
DATE: 7/15/85

SIGNED: George L. Rodriguez
TITLE: _____
DATE: _____

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

DRAINAGE CALCULATIONS

I. REFERENCES:

A. City of Albuquerque Development Process Manual (DPM) Volume 2, Design Criteria, Chapter 22: Drainage, Flood Control, and Erosion Control.

B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, United States Department of Agriculture, Soil Conservation Service.

C. Floodway Flood Boundary and Floodway Map, City of Albuquerque, New Mexico, Panel 28 of 50.

II. GENERAL INFORMATION:

A. Soil Type (Ref. B, Page 30):
Soil type is 'Af' (Aqua Loam), Hydrologic soil group 'B'.

B. Imperviousness:

Type of Surface	Existing Sq. Ft. / Acres	Area	Proposed Sq. Ft. / Acres	Area
Building roof	N/A		2250	0.052
Concrete Surfaces	N/A		535	0.012
Asphalt Surfaces	N/A		19940	0.457
Landscaping	N/A		N/A	
Undeveloped Surface	31637	0.726	8912	0.205
Site Total	31637	0.726	31637	0.726
Percent Impervious	0.0%		71.8%	

C. "C" Factor (See Ref. A, Plate 22.2 C-1):

1. Undeveloped "C" Factor = 0.34
2. Developed "C" Factor = 0.70

D. Rainfall, 100-year, 6-hour, R(6), (Ref. A, Plate 22.2 D-1):

R(6) = 2.20 inches

E. Time of Concentration, T_c:

Use a minimum value of 10 minutes for calculations.



F. Rainfall Intensity, I (See Ref. A, Plate 22.2 D-2):

$$\begin{aligned} I &= R(6) \times 6.84 \times T_c(-0.51) \\ &= 2.20 \times 6.84 \times 10(-0.51) \\ &= 4.65 \text{ in/hr} \end{aligned}$$

III. PEAK DISCHARGE:

A. Existing Conditions (Use Rational Method):

$$\begin{aligned} Q(100) &= 0.34 \times 4.65 \times 0.726 \\ &= 1.15 \text{ cfs} \end{aligned}$$

$$\begin{aligned} Q(10) &= 0.657 \times 1.15 \\ &= 0.75 \quad (\text{Ref. A, Plate 22.2 D-1}) \end{aligned}$$

B. Developed Conditions:

$$\begin{aligned} Q(100) &= 0.70 \times 4.65 \times 0.726 \\ &= 2.36 \text{ cfs} \end{aligned}$$

$$\begin{aligned} Q(10) &= 0.657 \times 2.36 \\ &= 1.55 \text{ cfs} \end{aligned}$$

IV. SIDEWALK DRAINAGE CHANNEL CAPACITY:

$$\begin{aligned} A &= 1.56 \text{ sq.ft.} \\ P &= 2.17 \text{ ft.} \\ R &= A/P = 0.72 \text{ ft.} \\ S &= 0.02 \text{ ft/ft} \\ n &= 0.013 \end{aligned}$$

By Manning's Equation:

$$\begin{aligned} Q &= \frac{1.486}{n} \times A \times R^{2/3} \times S^{1/2} \\ &= 20.26 \text{ cfs} \end{aligned}$$

Drainage area to discharge through channel:

$$\begin{aligned} A &= 0.341 \text{ acres} \\ \text{Also: } C &= 0.90; \text{ and } I = 4.65 \end{aligned}$$

Therefore, the peak discharge through channel (using the Rational Method) shall be:

$$\begin{aligned} Q(100) &= 0.90 \times 4.65 \times 0.341 \\ &= 1.4 \text{ cfs} \end{aligned}$$

Therefore, the drainage channel has adequate capacity to carry the maximum volume required.



V. CONSTRUCTION NOTES:

1. Two (2) working days prior to any excavation, contractor must contact line locating service at 765-1234 for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
3. All work on this project shall be performed in accordance with applicable Federal, State and Local laws, rules, and regulations concerning construction safety and health.
4. All construction within City Right-of-Way shall be performed in accordance with applicable City of Albuquerque standards and procedures.

VI. GENERAL NOTES:

City Zone Atlas Map
City Bench Mark

J-13
STA 7+13A

VII. FLOOD INFORMATION:

Subject property is not situated within a designated 100 year flooding zone, however the entire site is located within the 500 year flood zone (as per Reference 1C).

VIII. EROSION CONTROL:

During construction phase, two (2) new drive pads shall be constructed within the City Right-of Way. The contractor shall promptly clean up any material excavated within the public Right-of Way, such that the excavated material is not susceptible to being washed down the streets.

The proposed curb within the property shall be constructed such that it prohibits any flow over the public sidewalks

IX. OFF-SITE FLOW:

There is no flow onto this site from off-site sources. Slopes west of the western property line fall away from the subject property precluding any off-site flow from this direction. An existing bar ditch along the northern property line, and existing curbs beyond the eastern and southern property lines prohibit any off-site flow from these directions.

