HYDROLOGY H14/D12 2 PLANS

H14/D12

2 PLANS

DMJM / AHA ALBUQUERQUE	PROJECT Burton Motor Company	PROJECT NO 4681-02-01	PAGE 1
		BY: C Burm	DATE: 1-17-85

SUBJECT DRAINAGE FOR BUILDING Addition.

BASIS OF DESIGN:

1. Addition to Existing Building
2. Existing Site has approved Drainage Plan.
3. No Additional Work or Grading on Site except for Building Addition.
4. From pre-design conference
   Pond volume shall be increased for additional Vol due to increased imperviousness.
5. Discharge rate to remain at existing value.

Existing POND Volume:

Bottom Area : $\frac{22+24}{2} \times 42.5 = 977.5$ SF

Top Area : $\frac{30+34}{2} \times 52 = 1664$ SF

Depth : 65.2 - 64.4 = 0.8'

Vol : $\frac{977.5 + 1664}{2} \times 0.8$

= 1056.6 cf use 1060

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DMJM / AHA ALBUQUERQUE	PROJECT Burton Motor Company	PROJECT NO 4681-07-01	PAGE 2
SUBJECT		BY: C. Burm / DATE: 1-17-85	

Additional Impervious Area:

$\frac{9' + 7'}{2} \times 18'$ + $\frac{7' + 8'}{2} \times 15'$ (Existing Paved Area under New Addition)

144 S.F. + 112.5 S.F.

= 256.5 S.F.

Additional Volume required for Additional Impervious Area

rainfall = 2.2 inches.

C for Roof = .95

C for Paved = .35

Increase in C = 0.95 − 0.35 = 0.6

Vol = 256.5 × 2.2/12 × 0.6

= 28.2 ~~ac~~ 30 cfs

Increase from Pavement surface to Roof Area

C Pavement − Conc = 0.90

C Roof = 0.95

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HYDROLOGY SECTION

DMJM / AHA ALBUQUERQUE	PROJECT Burton Motor Company	PROJECT NO 4681-02.01	PAGE 3
		BY: C. Burn / DATE: 4-17-85	

SUBJECT Drainage Calcs

Area of Pavement + Curb

New Building Area - Pond Area

(50 x 25) - 256.5

= 993.5 s.f.

Vol = 993.5 x 2.2/12 x 0.05

= 9.1 c.f. use 10 cfs

New Pond Vol. Req.

New Vol = Old Vol. + Vol. of Pond increase + Vol. of Pavement Increase

= 1060 + 30 + 10

= 1100 c.f.

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JAN 21 1985
HYDROLOGY SECTION

DMJM / AHA ALBUQUERQUE	PROJECT Burton Motor Company	PROJECT NO 4681-02-01	PAGE 4
		BY: C. Burm / DATE: 1-17-85	

SUBJECT DRAINAGE CALCS.

New Pond Vol. Provided

Top Area : $\frac{30+32}{2} \times 40'$

= 1240 S.F.

Bottom Area : $\frac{18+20}{2} \times 30'$

= 570 S.F.

Depth : 65.2 - 63.9

= 1.3'

Vol = $\frac{1240+570}{2} \times 1.3'$

= 1176 c.f.

1176 cf > 1100 cf therefor OK

RECEIVED
JAN 21 1985
HYDROLOGY SECTION

DMJM / AHA ALBUQUERQUE	PROJECT BURTON MOTOR COMPANY	PROJECT NO 4681-02-01	PAGE 5
		BY: C. Burm / DATE: 1-17-85	

SUBJECT DRAINAGE CALCS

OUTLET CAPACITY

Existing 4" Pipe outlet with 0.8' of head

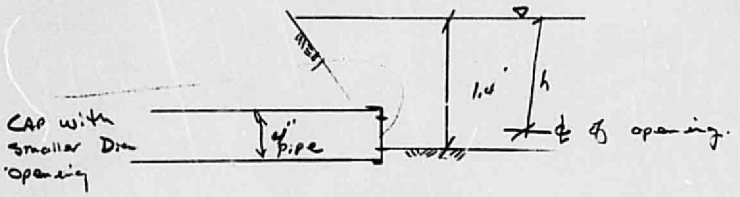
$Q = 0.33$ cfs. ±

New 4" Pipe Outlet with 1.4' of head

$Q = 0.46$ cfs

therefore need to restrict 4" inlet.

use 4" cap with smaller hole drilled in cap.



try 3" Dia Hole

$$Q = C A \sqrt{2gh}$$

$$= 0.6 \times 0.049 \times \sqrt{9 \times 32 \times 1.275}$$

$$= 0.27$$

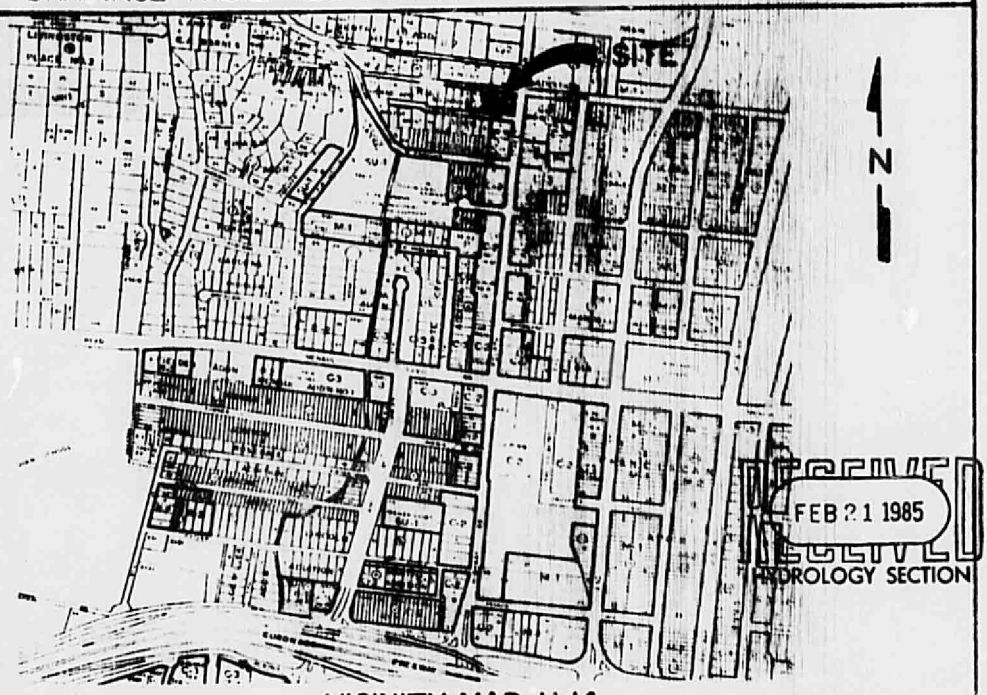
RECEIVED JAN 21 1985 HYDROLOGY SECTION

therefore 3" opening O.K. $0.27 < 0.33$

use 4" cap with 3" Dia opening

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



RECEIVED
FEB 21 1985
HYDROLOGY SECTION

VICINITY MAP H-14

LEGAL DESCRIPTION

LOT 1-A OF REPLAT OF LOTS 1 THRU 4 OF THE AMENDED PLAT OF BLOCK 1 OF THE MORNINGSIDE ADDITION.

BENCH MARK ACS "5-H14"

LOCATED AT THE INTERSECTION OF 4TH AND CLAREMONT, N.W. IN THE SOUTHEAST QUARDRANT A CHISELED SQUARE ON TOP OF CONCRETE CURB AT THE S.S.E. RETURN.
ELEVATION=4965.487
SOURCE: ACS BK. PG. D-178 W/REVISION NO. 3

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 "Public Works Contract No. 845"
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 RESIDENTIAL street use.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

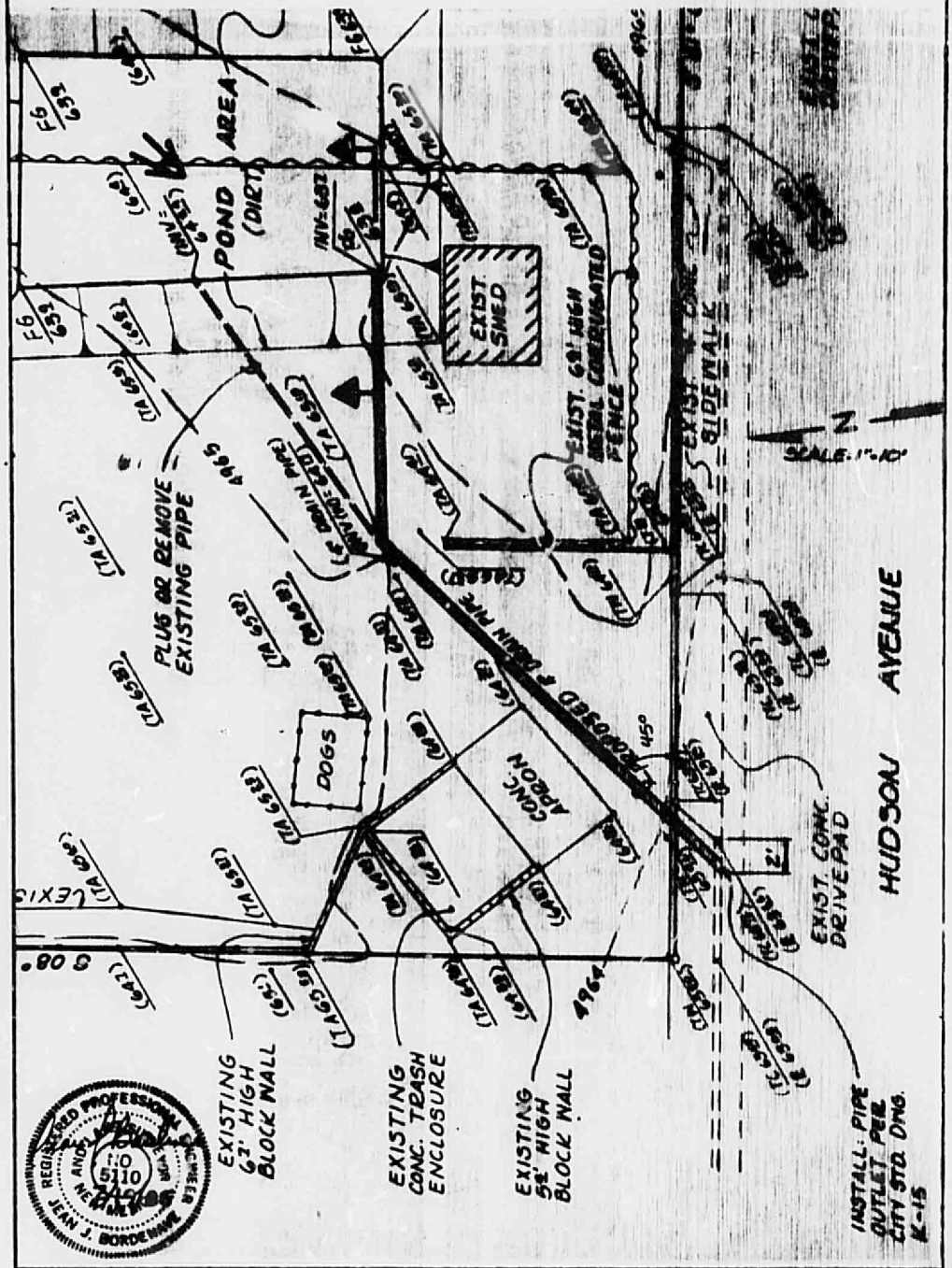
TITLE: **BURTON MOTOR CO.**
3101 4TH STREET

PERMIT NO.
SHEET 1 OF 2

MAP NO. H-14

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



APPROVALS	NAME	DATE	TITLE: BURTON MOTOR CO. DRAIN OUTLET
A.C.E./DESIGN			
INSPECTOR			PERMIT NO. SHEET 2 OF 2 — MAP NO. H-14
A.C.E./FIELD			

RAY L. HARRISON & ASSOCIATES
CONSULTING ENGINEERS

1517-A GIRARD BLVD. NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-4276

Assistant City Engineer, Hydrology
Box 1293
Albuquerque, NM 87103

Re; Drainage Plan Auto Sales Lot for Complete
Auto Sales File H14 - D12

I certify that the requirements of the referenced
drainage plan have been meet in all catagories.
As built drawing attached.

Ray L Harrison
Ray L. Harrison

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

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

March 12, 1985

Charles Burm
DMJM/Adam, Hamlyn, Anderson
5700 Harper Drive, NE Suite 280
Albuquerque, New Mexico 87109

RE: REVISED DRAINAGE PLAN FOR BURTON MOTOR COMPANY
3101 FOURTH STREET, NW (H-14/D12) RECEIVED FEBRUARY 21, 1985

Dear Mr. Burm:

The referenced plan dated February 20, 1985, is approved.

Please attach a copy of this approved plan along with the appropriately approved "Drainage Facilities Within City Right-of-Way" document to the construction set prior to Hydrology sign-off.

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

Cordially,

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

CAM/bsj

cc: Greg Olson
Design Section

DRAINAGE INFORMATION SHEET

PROJECT TITLE: BURTON MOTOR COMPANY ZONE ATLAS/DRWG. FILE #: H-14/D-12 update

LEGAL DESCRIPTION: LOT 1-A OF REPLAT OF LOTS 1 THRU 4 OF THE AMENDED PLAT OF BLOCK 1 of MORNINGSIDE ADDITION.

CITY ADDRESS: 3101 FOURTH STREET, N. W.

ENGINEERING FIRM: DMJM CONTACT: MR. CHARLES BURM

ADDRESS: 5700 Harper Drive, N. E., Suite 280 PHONE: 822-7955

OWNER: MR. STEVE TADAY CONTACT:

ADDRESS: 2025 FOURTH, N. W. PHONE: 242-2878

ARCHITECT: BILL BUCKLEY CONTACT: MR. BILL BUCKLEY

ADDRESS: 740 SAN MATEO, N. E., SUITE B PHONE: 255-9196

SURVEYOR: DMJM CONTACT: MR. WALT RICHARDS

ADDRESS: HARPER DRIVE, N. E., SUITE 280 PHONE: 822-7955

CONTRACTOR: NEW VENTURES CONTACT: MR. BILL EICHHORST

ADDRESS: P. O. BOX 3706, PHONE: 345-8216

• PRE-DESIGN MEETING:

____YES

____NO

____COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

RECEIVED FEB 21 1985 HYDROLOGY SECTION

TYPE OF SUBMITTAL:

____DRAINAGE REPORT

X 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

X BUILDING PERMIT APPROVAL

____FOUNDATION PERMIT APPROVAL

____CERTIFICATE OF OCCUPANCY APPROVAL

____ROUGH GRADING PERMIT APPROVAL

____GRADING/PAVING PERMIT APPROVAL

____OTHER _____ (SPECIFY)

DATE SUBMITTED: 2-20-85

BY: Charles Burm

Approve Form 2
Date 2-20-85
Carlos

DMJM/ Adam, Hamlyn, Anderson

Reply To: ☒ Albuquerque, NM 87109 5700 Harper Dr., NE, Suite 280 505-822-7955

LETTER OF TRANSMITTAL

TO: City of Albuquerque
Design Hydrology

ATTN: Mr. Billy Goolsby

DATE:	PROJECT NO.
2-20-84	4681-02-01
PROJECT: Burton Motor Co.	
H-4/D-12	

WE TRANSMIT:
(X) herewith ( ) under separate cover via
( ) in accordance with your request

FOR YOUR:
(X) approval ( ) distribution to parties ( ) information
( ) review & comment ( ) record
( ) use ( )

RECEIVED FEB 21 1985 HYDROLOGY SECTION

THE FOLLOWING:
(X) prints ( ) copy of letter ( ) change order
( ) originals ( ) specifications ( ) calculations
( ) shop drawings ( )

Copies	Dwg. No.	DESCRIPTION	Action Code
1		Revised Grading Plan	
1		Copy of S.O. 19 Submitted to Eng.	

Action Code
A. REVIEWED
B. REVIEWED AS NOTED
C. REVISE & RESUBMIT
D. REJECTED
E. See REMARKS below

REMARKS:

If enclosures are not as noted, please inform us immediately.

COPIES TO:

SIGNED: Charles Baum

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

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

February 12, 1985

Charles Burm
DMJM/AHA
5700 Harper Drive, NE Suite 280
Albuquerque, New Mexico 87109

RE: DRAINAGE PLAN FOR ADDITION TO BURTON MOTOR COMPANY
(H-14/D12) RECEIVED JANUARY 21, 1985

Dear Charles:

I only have two (2) comments in reference to the above submittal.

1. Water cannot be ponded closer that 15 feet to a structure without a soils report from a qualified engineer. Therefore, a soils report will have to be provided or the pond will have to be lined.

2. An approved "Drainage Facilities Within City Right-of-Way/Easement" document will be required.

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

Cordially,

Billy J. Goolsby

Billy J. Goolsby, P.E.
Design Hydrology Section

BJG/bsj

DRAINAGE INFORMATION SHEET

PROJECT TITLE: BURTON MOTOR COMPANY ZONE ATLAS DRWG. FILE #: H-14

LEGAL DESCRIPTION: LOT 1-A OF REPLAT OF LOTS 1 THRU 4 OF THE AMENDED PLAT OF BLOCK 1 of MORNINGSIDE ADDITION.

CITY ADDRESS: 3101 FOURTH STREET, N. W.

ENGINEERING FIRM: DMJM CONTACT: MR. CHARLES BURM

ADDRESS: 5700 Harper Drive, N. E., Suite 280 PHONE: 822-7955

OWNER: MR. STEVE TADAY CONTACT:

ADDRESS: 2025 FOURTH, N. W. PHONE: 242-2878

ARCHITECT: BILL BUCKLEY CONTACT: MR. BILL BUCKLEY

ADDRESS: 740 SAN MATEO, N. E., SUITE B PHONE: 255-9196

SURVEYOR: DMJM CONTACT: MR. WALT RICHARDS

ADDRESS: HARPER DRIVE, N. E., SUITE 280 PHONE: 822-7955

CONTRACTOR: NEW VENTURES CONTACT: MR. BILL EICHHORST

ADDRESS: P. O. BOX 3706, PHONE: 345-8216

PRE-DESIGN MEETING:

X YES DRB NO.

___ NO EPC NO.

X COPY OF CONFERENCE RECAP SHEET PROVIDED PROJ. NO.

TYPE OF SUBMITTAL:

- ___ DRAINAGE REPORT
- X 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
- X BUILDING PERMIT APPROVAL
- ___ FOUNDATION PERMIT APPROVAL
- ___ CERTIFICATE OF OCCUPANCY APPROVAL
- ___ ROUGH GRADING PERMIT APPROVAL
- ___ GRADING/PAVING PERMIT APPROVAL
- ___ OTHER ___ (SPECIFY)

DATE SUBMITTED: 1-18-85

BY: Charles Burm

RECEIVED JAN 21 1985 HYDROLOGY SECTION

DMJM/ Adam, Hamlyn, Anderson

Reply To: (X) Albuquerque, NM 87109 5700 Harper Dr., NE, Suite 280 505-822-7955

LETTER OF TRANSMITTAL

TO: City of Albuquerque
Design Hydrology

ATTN:

DATE: 1-18-85	PROJECT NO. 4681-02-01
PROJECT: Burton Motor Company	

WE TRANSMIT:
(X) herewith ( ) under separate cover via
( ) in accordance with your request

FOR YOUR:
(X) approval ( ) distribution to parties ( ) information
( ) review & comment ( ) record
( ) use ( )

THE FOLLOWING:
(X) prints ( ) copy of letter ( ) change order
( ) originals ( ) specifications (X) calculations
( ) shop drawings ( )

Copies	Dwg. No.	DESCRIPTION	Action Code
1		Information sheet	
1		Grading Plan	
1		Set of Calculations.	
1		Pre-Design Rec CAP	

Action Code
A. REVIEWED
B. REVIEWED AS NOTED
C. REVISE & RESUBMIT
D. REJECTED
E. See REMARKS below

RECEIVED
JAN 21 1985
HYDROLOGY SECTION

REMARKS:

If enclosures are not as noted, please inform us immediately.

COPIES TO:

SIGNED: Charles Burns

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

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: H-14 DATE: 12/3/84

PLANNING DIVISION NOS. EPC: _____ DRB: _____

SUBJECT: B Burton Motor Company

LEGAL DESCRIP.: Lot 1-A Blk 1 Morningside Addn.

APPROVAL REQUESTED

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

	WHO:	REPRESENTING:
ATTENDANCE:	Charles Burm	DMJM/AHA
	Billy Goolsby	City

____ 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: Plan to address proposed addition with regard to pond reduction & increase in imperviousness - Dicharge rate to remain at approximate existing value.

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: Billy J. Goolsby SIGNED: Chas. E. Burm
TITLE: CE Hydrology TITLE: Engineer
DATE: 12/3/84 DATE: 12-3-84

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

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

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: H-14 DATE: 12/3/84

PLANNING DIVISION NOS. EPC: _____ DRB: _____

SUBJECT: B Burton Motor Company

LEGAL DESCRIP.: Lot 1-A, Blk 1 Morningside Addn.

APPROVAL REQUESTED

_____ PRELIMINARY PLAT _____ FINAL PLAT

_____ SITE DEVELOPMENT PLAN X BUILDING PERMIT

_____ ROUGH GRADING

	WHO:	REPRESENTING:
ATTENDANCE:	Charles Burm	DMJM/AHA
	Billy Goolsby	City

_____ Approved 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 Guarantee required.

RECEIVED JAN 21 1985 HYDROLOGY SECTION

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SIGNED: Billy J. Goolsby SIGNED: Charles Burm

TITLE: CE/Hydrology TITLE: Engineer

DATE: 12/3/84 DATE: 12-3-84

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

Address 3101 4th St N.W Engr/~~Arch~~ Harrison

Plans Approved 6-4-82 Cond. ____

Comments: 4-4-DIL

again 4/4/83

Inspection Requested 8/24/82 Contractor ____

Appr. 4/7/83 Disappr. 8/24/82 30 Day Temp. ____

Comments: Inspect

Reinspection and/or comments:

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

H14 - D12

June 1, 1982

Mr. Ray Harrison
Ray Harrison & Associates
1517-A Girard Blvd. N.E.
Albuquerque, N.M. 87106

RE: REVISED DRAINAGE REPORT FOR AUTO SALES LOT

Dear Ray:

The referenced report is approved. Please see that the revised plans (dated 5/26/82) are placed in the City construction sets along with approved copies of Special Order No. 19.

Very truly yours,

Brian G. Burnett
Civil Engineer/Hydrology

BGB/tal

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

H14 - D12

June 1, 1982

Mr. Ray Harrison
Ray Harrison & Associates
1517-A Girard Blvd. N.E.
Albuquerque, N.M. 87106

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Very truly yours,

Brian G. Burnett
Civil Engineer/Hydrology

BGB/tsl

RAY L. HARRISON & ASSOCIATES
CONSULTING ENGINEERS

1517-A GIRARD BLVD. NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-4276

May 26, 1982

Richard S. Heller P. E., City Engineer
City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico

Attention: Brian Burnett

Re: AutoSales Lot Drainage Report File H 14 - D 12

Ref: Memorandum Brian Burnett to Ray ~~Harrison on~~
refer subject, dated May 20, 1982

Dear Brian,
Gutters will be installed on the NorthSide of the building with Pads to divert the roof drainage to the pond.

Ray L. Harrison
Ray L. Harrison

RECEIVED
MAY 26 1982
ENGINEERING

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

H14 - D12

May 20, 1982

Mr. Ray Harrison
Ray Harrison & Associates
1517 Girard Blvd. NE
Albuquerque, N.M. 87106

RE: AUTO SALES LOT DRAINAGE REPORT

Dear Ray:

I have reviewed the referenced report and it appears in compliance with the guidelines established by Mr. Jim Fink. However, I am a bit concerned about runoff from the north side of the building. Is water going to discharge over a sidewalk? Is it possible to have the roof drains discharge onto the pond areas?

We may be able to clear up this matter over the phone. Give me a call at your convenience.

Very truly yours,

Brian G. Burnett
Civil Engineer/Hydrology

BGB/tsl

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

H14 - D12

May 20, 1982

Mr. Ray Harrison
Ray Harrison & Associates
1517 Girard Blvd. NE
Albuquerque, N.M. 87106

RE: AUTO SALES LOT DRAINAGE REPORT

Dear Ray:

I have reviewed the referenced report and it appears in compliance with the guidelines established by Mr. Jim Fink. However, I am a bit concerned about runoff from the north side of the building. Is water going to discharge over a sidewalk? Is it possible to have the roof drains discharge onto the pond areas?

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Very truly yours,

Brian G. Burnett
Civil Engineer/Hydrology

BGB/tsl

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

RECEIVED
MAY 04 1982
ENGINEERING

DRAINAGE REPORT INFORMATION SHEET

PROJECT TITLE CAR SALES LOT FOR COMPLETE AUTO SALES

ZONE ATLAS PAGE NO. H 14 CITY ADDRESS 3101 4th St NW

LEGAL ADDRESS Lots 1=4 Morning Side Addition Block 1

ENGINEERING FIRM Ray Harrison & Associates CONTACT Ray Harrison

ADDRESS 1517 A Girard NE 87106 PHONE 265 4276

OWNER Steve Taday CONTACT Same

ADDRESS 2025 4th NW PHONE 242 2878

ARCHITECT/SURVEYOR Same CONTACT

ADDRESS PHONE

DATE SUBMITTED 5/3/82

BY RLH

MUNICIPAL DEVELOPMENT DEPARTMENT

ENGINEERING DIVISION Telephone (505) 766-7467

Y L. HARRISON & ASSOCIAT
CONSULTING ENGINEERS
1517-A GIRARD BLVD. NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-4276

DRAINAGE REPORT

AUTO SALES LOT
FOR
COMPLETE AUTO SALES

May 3, 1982

Lots 1-4, Block 1, Morningside Addition
3101 4th Street NW

DESIGN CRITERIA: The site was descussed with Jim Fink, Assistant City Engineer for Hydrology in a predesign conference. Three quarters of the tract is now developed as a service station. The criteria specified that as much ponding as convient be provided with positive discharge and an overflow.

1. ENGINEER CERTIFIES: Engineer will certify drainage concepts.

2. PLANNING HISTORY: No planning action in progress, lots are zoned properly.

3. PROFESSIONAL CERTIFICATION:
Drainage report, grading plan and survey by
Ray L. Harrison P. E. & L. S. 2198

4. FLOOD HAZARD: Site outlined on Master Drainage Study map attached. Site is not in flood hazard area but down stream conditions are flood prone.

5. WATER SHED SOILS: N/A

6. SOILS: No ponding within 15' of building of 10' of paving and P/L.

7. Watershed Offsite; There is no offsite drainage.

8. STORM FLOWS, OFFSITE: N/A

9. FLOW DEPTH AND VELOCITY: N/A

10. OTHER CONDITIONS: By inspection there are no other conditions that will affect site drainage.

11. PROPOSED TREATMENT, OFFSITE: N/A

12. ROW EASEMENTS: N/A

Comp[illegible]e Auto Sales

13. FLOW VOLUMES AND RATES, ONSITE:

Present Development

Impervious 18,562/43560 X 6 X .9 = 2.4 CFS

Undeveloped 6,075/43560 X 6 X .2 = .16 CFS

Total 2.46 CFS

14. FLOW DEPTH AND VELOCITY, ONSITE: There are no major flow channels onsite.

15. PROPOSED TREATMENT, ONSITE: The drainage from most of the tract will be diverted into a landscaped pond and released through a pipe to the street at a controlled rate.

16. Total area of tract 24,639 sq. ft.
Present development 18,560 sq. ft.
Proposed development 6,075 Sq. Ft.
Ponding required 6075 X 2/12 X .9 = 911 cu ft
Ponding furnished 1885 cu ft. (see section 1-1)
Equivalent area 1885/2/12 X .9 = 12,4[illegible] sq. ft.

Positive Discharge: Special Order 19 submitted to City Design Engineer, copy attached.
A 4" pipe on a 2% slope Q = .3 CFS Table 6-2 K & B
Allowable Q_1
18,560/43560 X .7 X .9 = .27 CFS
6,580/43560 X .7 X .2 = .09 CfS
Total .36 CFS

Emergency spillway
The 10' curb overflow is equivalent to a broad crested weir. $Q = 6LH^{3/2}$ H = .2' l = 10' C = 2.49 T 5-3
Q = 2.2 CFS

The capicity of the 10' X .2' swale is
Table 7-10 D = .2 D/b = .02 K = 150 s= .014 N =.014
Q= 17.7 CFS
The capicity of the overflow and swale is satisfactory,
Required capacity of overflow, Q_{100}
Area where drainage is diverted to pond 157 X 115 = 18,050 sq. ft.
18,050/43560 X 6 X.9 = 2.2 CFS

6. N/A

7. N/A

8. Quantification Q_{100}
Present development Q = 2.46 CFS Item 13
Proposed development
Pond capacity ares 12,460 sq ft Q = .3 CFS
Remaining Area 12,180/43560 X 6 X .9 = 1.5 CFS
Total 1.8 CFS

Ray L. Harrison
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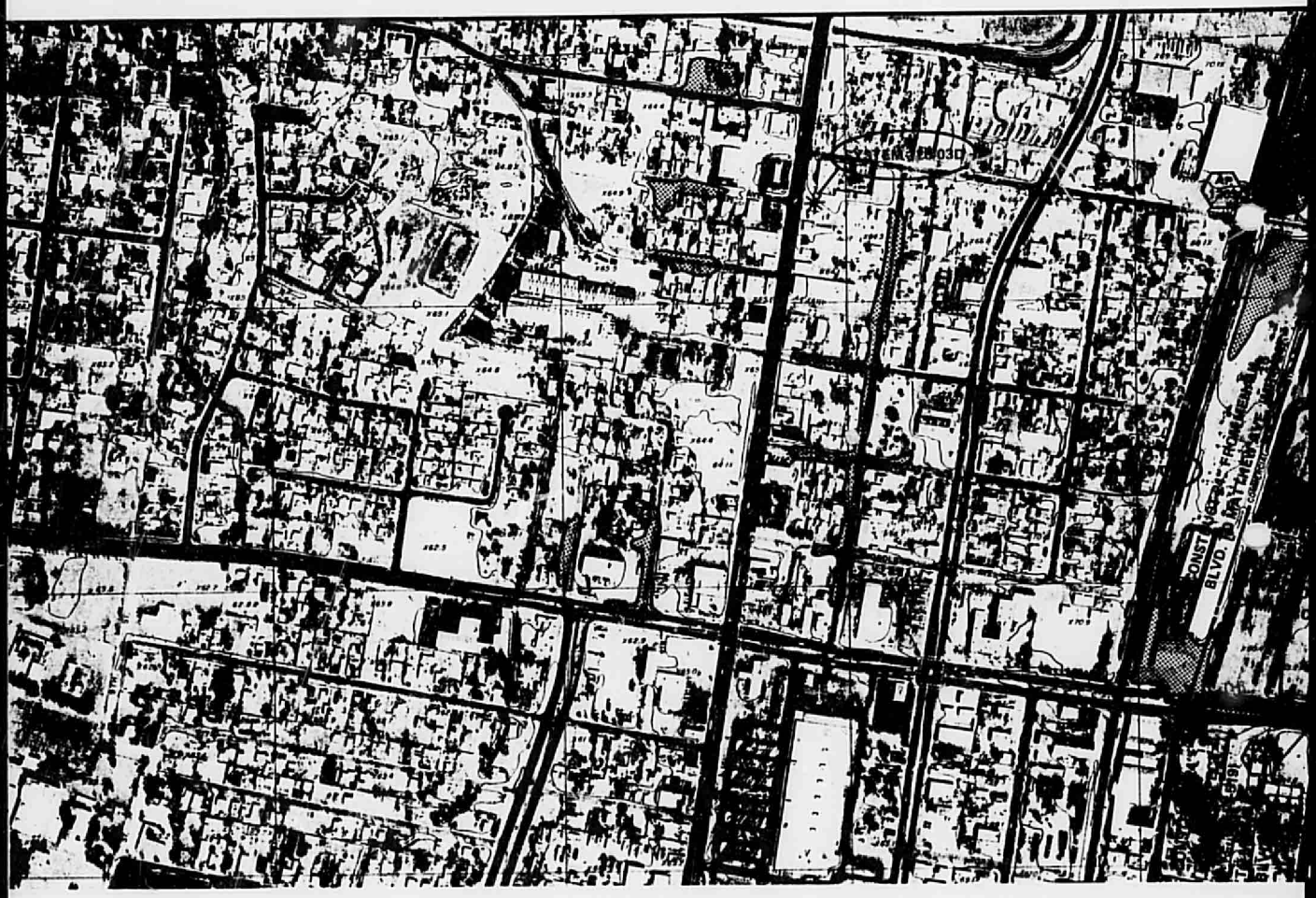
P. E. & L. S. 2198

SHEET H-14 MASTER DRAINAG STUDY

Lots 1-4 BLOCK 1 MORINGSIDE ADD.



RAY L. HARRISON & ASSOCIATES
CONSULTING ENGINEERS
1517-A GIRARD BLVD. NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-4276

DRAINAGE REPORT

AUTO SALES LOT
FOR
COMPLETE AUTO SALES

May 3, 1982

Lots 1-4, Block 1, Morningside Addition
3101 4th Street NW

DESIGN CRITERIA: The site was descussed with Jim Fink, Assistant City Engineer for Hydrology in a predesign conference. Three quarters of the tract is now developed as a service station. The criteria specified that as much ponding as convient be provided with positive discharge and an overflow.

1. ENGINEER CERTIFIES: Engineer will certify drainage concepts.

2. PLANNING HISTORY: No planning action in progress, lots are zoned properly.

3. PROFESSIONAL CERTIFICATION:
Drainage report, grading plan and survey by
Ray L. Harrison P. E. & L. S. 2198

4. FLOOD HAZARD: Site outlined on Master Drainage Study map attached. Site is not in flood hazard area but down stream conditions are flood prone.

5. WATER SHED SOILS: N/A

6. SOILS: No ponding within 15' of building of 10' of paving and P/L.

7. Watershed Offsite; There is no offsite drainage.

8. STORM FLOWS, OFFSITE: N/A

9. FLOW DEPTH AND VELOCITY: N/A

10. OTHER CONDITIONS: By inspection there are no other conditions that will affect site drainage.

11. PROPOSED TREATMENT, OFFSITE: N/A

12. ROW EASEMENTS: N/A

13. FLOW VOLUMES AND RATES, ONSITE:

Present Development		
Impervious	18,562/43560 X 6 X .9 =	2.4 CFS
Undeveloped	6,075/43560 X 6 X .2 =	.16 CFS
Total		2.46 CFS

14. FLOW DEPTH AND VELOCITY, ONSITE: There are no major flow channels onsite.

15. PROPOSED TREATMENT, ONSITE: The drainage from most of the tract will be diverted into a landscaped pond and released through a pipe to the street at a controlled rate.

16. Total area of tract 24,639 sq. ft.
Present development 18,560 sq. ft.
Proposed development 6,075 Sq. Ft.
Ponding required 6075 X 2/12 X .9 = 911 cu ft
Ponding furnished 1885 cu ft. (see section 1-1)
Equivalent area 1885/2/12 X .9 = 12,460 sq. ft.

Positive Discharge: Special Order 19 submitted to City Design Engineer, copy attached.
A 4" pipe on a 2% slope Q = .3 CFS Table 6-2 K & B
Allowable Q_1
18,560/43560 X .7 X .9 = .27 CFS
6,580/43560 X .7 X .2 = .09 CFS
Total .36 CFS

Emergency spillway
The 10' curb overflow is equivalent to a broad crested weir. $Q = 6LH^{3/2}$ H = .2' 1 = 10' C = 2.49 T 5-3
Q = 2.2 CFS

The capicity of the 10' X .2' swale is
Table 7-10 D = .2 D/b = .02 K = 150 s= .014 N =.014
Q= 17.7 CFS
The capicity of the overflow and swale is satisfactory,
Required capacity of overflow, Q_{100}
Area where drainage is diverted to pond 157 X 115 = 18,050 sq. ft.
18,050/43560 X 6 X.9 = 2.2 CFS
6. N/A
7. N/A
8. Quantification Q_{100}

Present development	Q = 2.46 CFS Item 13	
Proposed development		
Pond capacity ares	12,460 sq ft	Q = .3 CFS
Remaining Area	12,180/43560 X 6 X .9	= 1.5 CFS
Total		1.8 CFS

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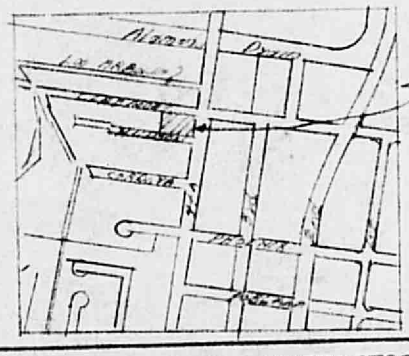
SHEET H-14 MASTER DRAINAGE STUDY

Lots 1-4 Block 1 MORINGSIDE ADD



NO SCALE

LOTS 1-4 BLOCK 1
MORNING SIDE ADD
3101 4th NW

H-14

NOTICE TO CONTRACTORS

1. New Mexico Standard Specifications for Public Works Construction-1979 Edition will be referred to hereon as the "Standard Specification".
2. All work detailed on these plans to be performed under contract shall, except as otherwise stated or provided for hereon, be constructed in accordance with "Contract Documents for City-Wide Utilities and Cash Paving No. 30 and the Standard Specification".
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 or surveyor so that the conflict can be resolved with a minimum amount of delay.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- [ ] All utilities and utility service lines shall be installed prior to paving.
- [x] Backfill compaction shall be according to specified street use.
- [ ] Tack coat requirements shall be determined by the City Engineer.
- [ ] Sidewalks and wheelchair ramps within the curb returns shall be constructed wherever a new curb return is constructed.
- [ ] If curb is depressed for a drivepad, the drivepad shall be constructed prior to acceptance of curb and gutter.
- [ ] All storm drainage facilities shall be completed prior to final acceptance.
- [ ] The requestor or developer shall be responsible for repair or replacement of all curb and gutter or sidewalk damaged after approval by the City Engineer of work completed by the Contractor.

APPROVED FOR RECORD DRAWINGS		APPROVED FOR CONSTRUCTION	
ASST. CITY ENGINEER, FIELD	DATE	CITY ENGINEER	DATE

CITY OF ALBUQUERQUE

APPROVALS	ENGINEER	DATE
A.C.E. DESIGN		
INSPECTOR		
A. C. E./FIELD		

TITLE: DRAIN LINE THROUGH CURB
3101 4th STREET NW

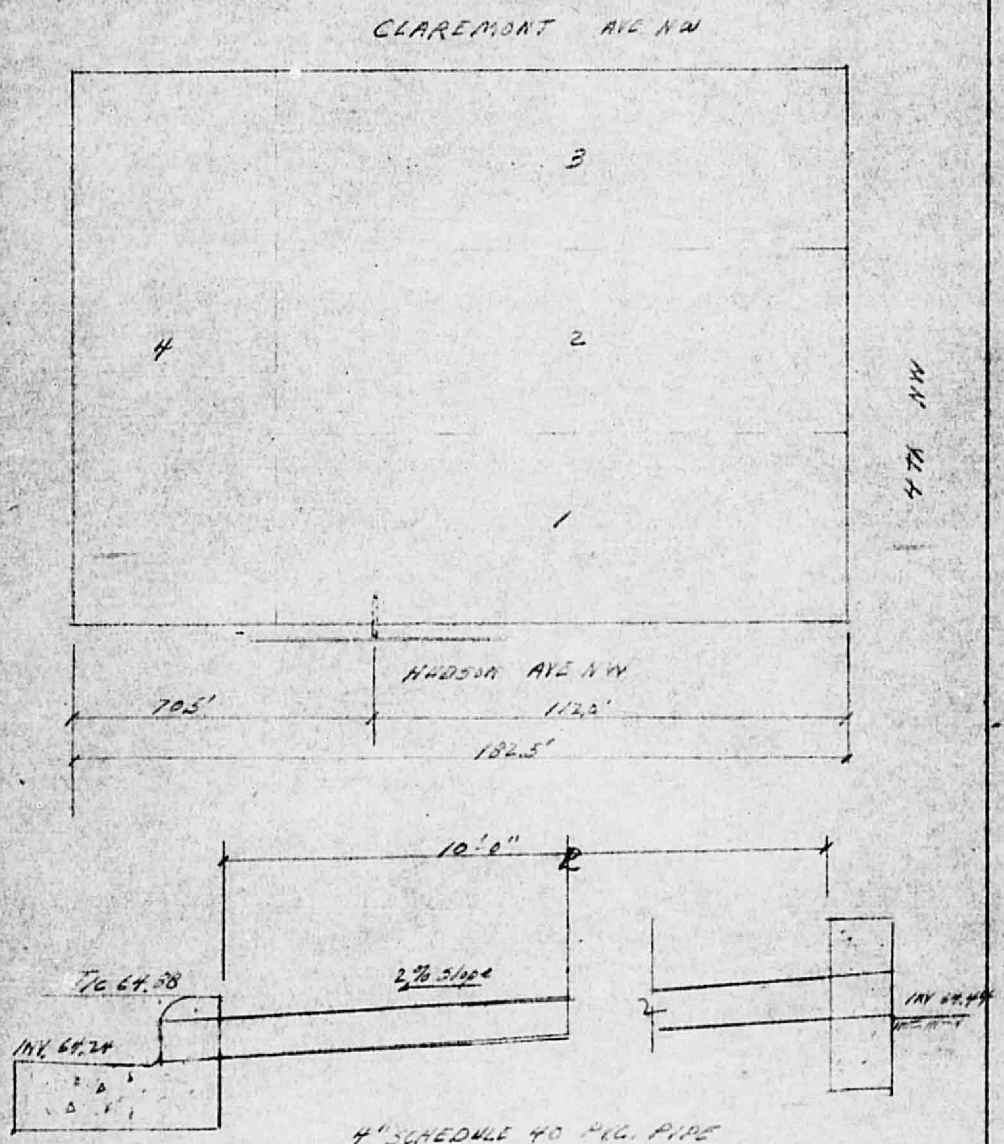
PROJECT NO.

MAP NO. H 14

SHEET 1 OF 2

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



Owner:
Steve Taday
2025 4th St. NW
Albuquerque, NM 87107
Phone 242 2878

Engineer:
Ray Harrison & Associates
1517 A Girard NE
ALBUQUERQUE, NM 87106

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 2198 STATE OF NEW MEXICO RAY HARRISON

APPROVALS	NAME	DATE	TITLE: DRAIN LINE THROUGH CURB 3101 4th Street NW	
A.C.E./DESIGN				
INSPECTOR			PERMIT NO.	MAP NO. H 14
A.C.E./FIELD			SHEET 2 OF 2	