HYDROLOGY K20/D33 3 PLANS

K20/D33

3 Plans

.86 53651

6077

GOLF COURSE

GRANT OF EASEMENT
FOR
SANITARY SEWER SERVICE LINE
AND STORM SEWER LINE

.6 329

K20-D33

THIS INDENTURE made and executed this 10th day of June, 1986, by and between The City of Albuquerque A Municipal Corporation

in the County of Bernalillo and State of New Mexico hereinafter called the Grantor and Sheilah P. Garcia, hereinafter called the Grantee.

WITNESSETH, that for good and valuable consideration the receipt of which is hereby acknowledged the Grantors have this day granted and by these presents do grant, and deliver unto Sheilah P. Garcia a permanent easement as right-of-way including the permanent right to enter upon the real estate hereinafter described upon notification and authorization of golf course management and install, maintain and repair a sanitary sewer service line and a storm sewer line across, through, and under the lands hereinafter described.

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AUG 01 1986
HYDROLOGY SECTION

Any obstruction encountered during location, construction or maintenance of said lines will be coordinated with golf course management. Any plant material obstructing construction or maintenance will be protected from damage. Approval shall be obtained from golf course management should any plant material require relocation or modification because of sewer line or storm line construction or maintenance.

The land affected by the grant of this easement and right-of-way is located in the County of Bernalillo and State of New Mexico and is more particularly described as follows:

DESCRIPTION FOR PERMANENT SANITARY SERVICE
AND STORM SEWER LINE
EASEMENT

See Attached Exhibit "A"

TO HAVE AND TO HOLD the said right and easement for the uses and purposes aforesaid, unto Grantee here successors and assigns for so long as said easement shall not be abandoned for use as a right-of-way for aforesaid sewer and storm sewer lines.

Grant of Easement
Page Two

As a part of the consideration for this grant, the Grantee does hereby release any and all claims for damages for whatsoever cause incidental to the exercise to the rights herein granted provided, however, the Grantee agrees to save Grantor harmless from any and all liability that may arise as a result of the construction and use of the easement for the purposes set forth.

IN WITNESS WHEREOF, the parties have set their hands and seals this 10th day of June, 1986.

City of Albuquerque,
a municipal corporation

Gene Romo
Chief Administrative Officer

STATE OF NEW MEXICO )
) ss.
COUNTY OF BERNALILLO )

The foregoing instrument was acknowledged before me this 10th day of June, 1986, by Gene Romo, Chief Administrative Officer

Christine M. Lovato
Notary Public

My Commission Expires:

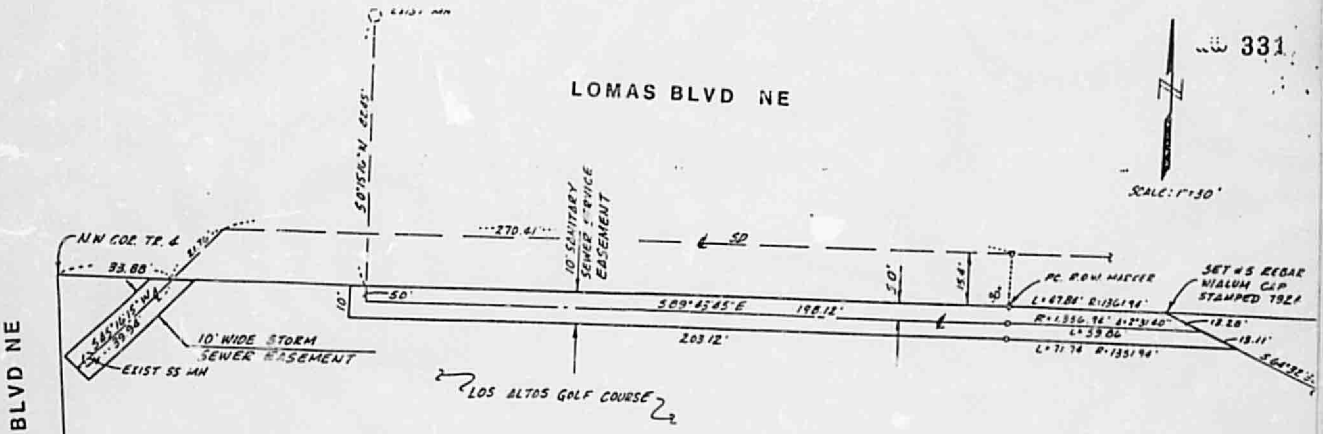
3-26-90

STATE OF NEW MEXICO
COUNTY OF BERNALILLO
FILED FOR RECORD

1986 JUN 13 PM 2:47

Mar 362 PG 329-331

FLORENCE C. WALLER
CLERK RECORDER




TRACT 4

MUNICIPAL ADD NO 2

Filed July 12, 1955 Bk D1-Pg 143

SANTIAGO ROMERO, JR.
NEW MEXICO
7924
5/5/86
REGISTERED PROFESSIONAL LAND SURVEYOR

# EXHIBIT A

8941-C.1.2

# DRAINAGE REPORT FOR GARCIA'S HONDA

The site is a commercial lot fronting on Lomas Blvd. NE and bounded by Herndon St. and the Municipal Golf Course. The site is shown on zone atlas map K-20 (see Plate 1). The area is not in the flood plain.

The following 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) = 3.2 acres

Soil Classification - Tijeras Complex. SCS Group - B

P = 2.38" for 100 year storm.

P = 1.56" 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

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AUG 01 1986
HYDROLOGY SECTION

**Existing Conditions:**

C = 0.34 (0% impervious)

$T_c = 0.0078\ (1100^{.77})/0.011^{.385} =$ 9.7 min. Use 10 min.

$i = 6.84 \times 10^{-.51} \times 2.38 = 5.0$ for 100 yr. storm

i = 5.0 x 0.657 = 3.3 for 10 yr. storm

$Q_{100} = 0.34 \times 5.0 \times 3.2 = 5.4$ cfs

$Q_{10} = 0.34 \times 3.3 \times 3.2 = 3.6$ cfs

CN = 61

S = 6.39

R.O. = 0.16" - 100 yr. storm

$V_{100}$ = 0.16 x 3.2 x 43,560/12 = 1,860 cf

R.O. = 0.11" - 10 yr. storm

$V_{10}$ = 1,280 cf

Developed Conditions: (See attached Sheet C-4)

Impervious area = 80% = 2.56 acres

Composite C = $\frac{1 \times 2.56 + 0.64 \times 0.34}{3.2}$ = 0.87

$T_c = 0.0078\ (1060^{.77})/0.0145^{.385}$ = 8.5 min. Use 10 min.

$i = 6.84 \times 10^{.-51} \times 2.38$ = 5.0 for 100 yr. strom

i = 3.3 for 10 yr. storm

$Q_{100}$ = 0.87 x 5.0 x 3.2 = 14 cfs

$Q_{10}$ = 0.87 x 3.3 x 3.2 = 9 cfs

CN = 88

Composite CN = 91

S = 1.0

R.O. = 1.5 - 100 yr. storm

$V_{100}$ = 1.5 x 3.2 x 43,560/12 = 17,400 cf

R.O. = 1.0 - 10 yr. storm

$V_{10}$ = 11,600 cf

Off-site Conveyance of Storm Flow: (See attached Sheet C-4A)

Storm flow from the paved parking lot will be directed thru a seeded area to a single "D" inlet near the north property line. The inlet will be provided with a 8" depth of dumped riprap to form an erosion protection basin.

Drainage will be carried thru a 24" RCP storm drain to the existing city manhole on the existing 60" storm drain.

Backfill will be placed to restore the original ground profile.

Basis of Design:

$$Q = A \times \frac{1.486}{n} \times R^{2/3} \times s^{1/2} \text{ (Manning formula)}$$

$Q = CLH^{3/2}$ (Inlet formula)

Storm Drain Design:

$A = 3.14$ sf (24" RCP)

$S_1 = 0.012$ ft./ft. - upstream portion

$S_2 = 0.010$ ft./ft. - downstream portion

$n = 0.013$

$Q_1 = 3.14 \times \frac{1.486}{0.013} \times 0.63 \times 0.11 = 24.9$ cfs

$Q_2 = 22.6$ cfs

Area Inlet Design:

Culvert pipe diameter - D = 2.0'

Headwater depth - H = 1.0'

$Q/D^{5/2} = 2.56 < 4$

$H/D = 0.50$

$C = 3.34$

$Q = 3.34 \times 16 \times 1^{3/2} = 53.4$ cfs

8541-C.11.2

# ADDENDUM TO THE DRAINAGE REPORT FOR GARCIA'S HONDA

Hydraulic grade lines for the 24" RCP storm drain for on-site flow and the 10" PVC drain for offsite drainage control have been computed.

Basic of Design:

$$d/D = Qn/D^{8/3} S^{1/2}$$

$$f = 185n^2/D^{1/3}$$

$$h_f = f \times \frac{L}{D} \times \frac{V^2}{2g}$$

$$\text{Entrance/exit } h_f = 0.1 \frac{V^2}{2g}$$

No hydraulic grade line was available for the existing 60" storm drain, so the top of pipe was assumed, giving an H.G.L. elevation of 5353.82. The invert of the 24" line where it enters the existing manhole is 5355.11 which gives a free fall entrance.

The 10" drain line enters the single "C" inlet at the southwest corner of Herndon and Lomas at invert elevation of 5375.75. The inlet is the upper end of a storm drain system which serves the Animal Control Center. The system is now under construction.

HYDRAULIC GRADE LINE COMPUTATION SHEET

n = 0.013

Project: GARCIAS HONDA
24" RCP STORM DRAIN

| Station | Invert Elev. | D | W.S. Elev. | Q | Area | V | $H_f$ | H.G.L. Elev. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0+00 | 55.11 | 0.58 | 55.69 | 14 | 0.76 | 5.49 | — | 55.69 | |
| 0+59 | 55.70 | 0.52 | 56.22 | ↑ | 0.65 | 5.65 | 0.34 | 56.56 | |
| MH | | | | | | | 0.05 | 56.61 | |
| 3+59 | 59.30 | 0.52 | 59.82 | | 0.65 | 5.65 | 1.84 | 61.66 | |
| MH | | | | ↓ | | | 0.05 | 61.71 | |
| 4+39 | 60.26 | 0.52 | 60.78 | 14 | 0.65 | 5.65 | 0.49 | 61.27 | |
| | | | | | | | | | |
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HYDRAULIC GRADE LINE COMPUTATION SHEET

n=0.012

Project: GARCIAS HONDA
10" PVC OFFSITE DRAIN

| Station | Invert Elev. | D | W.S. Elev. | Q | Area | V | $H_f$ | H.G.L. Elev. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| INLET (2+14) | 75.75 | 0.14 | 75.89 | 1.0 | 0.06 | 1.70 | 0.01 | 76.85 | H.G.L. out of "C" Inlet=76.84 |
| 2+14 | 75.75 | 0.14 | 75.89 | 1.0 | 0.06 | 1.70 | — | 76.85 | from Tom Mann |
| 0+00 | 76.82 | 0.14 | 76.96 | 1.0 | 0.06 | 1.70 | 0.24 | 77.21 | |
| | | | | | | | | | |
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CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: K-20 DATE: 12-12-85

PLANNING DIVISION NOS: EPC: _____ DRB: _____

SUBJECT: Garcia's Honda

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: Portion of Tract 4, Los Altos Golf Course

APPROVAL REQUESTED:

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

RECEIVED FEB 14 1986 HYDROLOGY SECTION

| ATTENDANCE: WHO | REPRESENTING |
|---|---|
| Fred J. Aguirre | City Engineer |
| Joe Almers | Flatow Moore Bryan & Assoc. |
| Bob Sheppard | Flatow Moore Bryan & Assoc. |

FINDINGS:

1. An approved drainage plan will be required prior to Building Permit release.
2. Conceptual grading and drainage plan required for "Foundation Only".
3. Two options available for discharge from site, they are:
   A. 100% ponding with pump discharging to Lomas or
   B. Obtain drainage easements across Golf Course to drain to Wyoming
      a. Also need covenant for maintenance responsibilities of easement or pumping scheme.
   C. Free discharge available for option "B" if discharge is into the 60" S.D. in Wyoming.
4. Replatting action needs to be completed prior to final C.O. release.

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: Fred Aguirre SIGNED: Joe Almers
TITLE: _____ TITLE: _____
DATE: 12/12/85 DATE: _____

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

# CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

RECEIVED
OCT 15 1986
HYDROLOGY SECTION

INTER-OFFICE CORRESPONDENCE

October 13, 1986

REF. NO._____

TO: Fred Aquirre, Planning Division, Engineering Group/PWD

FROM: Andre Houle, Design Division, Engineering Group/PWD

SUBJECT: DRB INFRASTRUCTURE LISTING - DRB-86-91 - PROJECT #2738-GARCIA HONDA, TOYOTA CITY

Transmitted herewith is a copy of the Construction Section's Final Acceptance Recommendation along with the inspector's as built quantites and a copy of the DRB Infrastructure Listing for your review. This fulfills the DRB Infrastructure Listing requirements necessary for final plat signoff.

Should you need any additional information, please do not hesitate to contact our office.

Attachments (3)

cc: Project File

Doc. #6135E

MUNICIPAL DEVELOPMENT DEPARTMENT

ENGINEERING DIVISION - FIELD SECTION

FINAL ACCEPTANCE RECOMMENDATION

RECEIVED
SEP 30 1986
CITY ENGINEER

DATE: 9-24-86

MAP NO.: K-20

PROJECT NO.: 2938

The above referenced work order has been completed in accordance with the plans and specifications and acceptable as-built drawings have been submitted to our office. I recommend the work order for final acceptance effective 9-24-86

CONTRACTOR: Parallax

INSPECTOR: Eddie Reybal

SUBDIVISION: Municipal Add. No 2

LOCATION: Whitelaw Ext. on Lemon N.E. from Wyoming to Herndon

SUBMITTED DOCUMENTATION:

WORK ORDER: ✓

FINAL QUANTITIES:

INSPECTOR'S: ✓

CONTRACTOR(S) ✓

FEES:

PERMITS: ✓

TESTING: ✓

EXPLANATION OF OVERRUNS/UNDERRUNS GREATER THAN 10%

INSPECTOR Eddie A. Reybal DATE 9-24-86

ASSISTANT CITY ENGINEER-FIELD SECTION DATE

9-29-86

PROJECT NO. 2738
SHEET 2 OF 4

7. Specific Location:

Lomas Blvd. southside from
Wyoming Blvd. to Herndon St. N.E.

8.

| W | SAS | SD | P | M |
|---|---|---|---|---|
| X | X | | | |

| 9. Item No. | 10. Short Description | 11. Est. Unit Price | 12. Est. Quantity | 13. Est. Amount | 14. As-Built Quantity | 15. As-Built Amount |
|---|---|---|---|---|---|---|
| B-2 | 6" PVC/FRP P | $ 13.50 | 10 lf | $ 135.00 | 23 L.F. | |
| B-3 | 8" PVC/FRP P | $ 15.00 | 1770 lf | $26550.00 | 1738 L.F. | |
| W-45 | PRESS CONN | $ 600.00 | 2 ea | $ 1200.00 | 2 Ea. | |
| W-47 | MJ FIT (4'-14") | $ 2.00 | 695 lb | $ 1390.00 | 695 lbs. | |
| W-60 | 12' TAP SLV | $ 950.00 | 1 ea | $ 950.00 | 1 Ea. | |
| W-63 | 6" TAP SLV | $ 650.00 | 1 ea | $ 650.00 | 1 Ea. | |
| W-66 | 6" GV | $ 400.00 | 1 ea | $ 400.00 | 1 Ea. | |
| W-67 | 8" GV | $ 500.00 | 1 ea | $ 500.00 | 1 Ea. | |
| W-82 | V BOX-A | $ 250.00 | 2 ea | $ 500.00 | 2 Ea. | |
| W-87 | FH 4 1/2' BURY | $1050.00 | 2 ea | $ 2100.00 | 2 Ea. | |
| W-180 | 3/4" SERV W/ NEW MAIN | $ 360.00 | 1 ea | $ 360.00 | 1 Ea. | |
| W-185 | 2" SERV W/NEW MAIN | $ 660.00 | 1 ea | $ 660.00 | 1 Ea. | |
| W-186 | BLKG | $ 120.00 | 3 cy | $ 360.00 | 3 Cy. | |
| M-28 | REM & REPL ART PVMT W/OUT M-PROC | $ 35.50 | 94 sy | $ 3337.00 | 80 sy. | |
| P-13 | PCC C & G REM | $ 5.00 | 66 lf | $ 330.00 | 54 L.F. | |
| P-14 | (SDWK) REM | $ 3.30 | 34 sy | $ 112.20 | 24½ S.Y. | |
| P-42 | 4" PCC SDWK | $ 2.20 | 308 sf | $ 677.60 | 220 S.F. | |
| P-46 | PCC STD C & G | $ 9.50 | 54 lf | $ 513.00 | 54 L.F. | |
| | D.P. Fillet Ram-+Repl. | | 0 | | 105 S.F. | |

16. Subtotal $40,724.80
Contingencies 10% $ 4,072.48
Engineering 10% $ 4,072.48
Testing Fee 2% $ 814.50
Total Construction Cost $49,684.26

Reduce Engineering Fee by Amount of DESIGN DEPOSIT FEE Paid=$ 664.50

17. (Procedure C only)

COST APPORTIONMENT

| | CITY-TO PAY POLICY NO. | POLICY NO. | POLICY NO. | DEVELOPER-TO-PAY POLICY NO | POLICY NO. |
|---|---|---|---|---|---|
| CONST. | $ | $ | $ | $ | $ |
| CONT. | | | | | |
| ENG. | | | | | |
| TESTING | | | | | |
| SUB-TOTALS | $ | $ | $ | $ | $ |

TOTAL CITY COST: $ TOTAL DEVELOPER COST: $

18. NOTES: (Applicable notes are used; information filled in)
a. Outstanding Pro-rata: None.
b. For staking, construction, and inspection use Drawing No. 2738

Rev. 12/85

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MAR 06 1986
HYDROLOGY SECTION

D.R.B. Case No. [illegible]
D.R.C. Project No. _____
Date Submitted _____

Figure 11

EXHIBIT "D"
to Subdivision Improvements Agreement

D.R.B. REQUIRED INFRASTRUCTURE LISTING
for Garcia Honda

Following is a summary of Public/Private Infrastructure required to be constructed or financially guaranteed to be constructed for the above development.

| Size | *Type Improvement | Location | From | To |
|---|---|---|---|---|
| 8" | Watermain | Wyoming Blvd N.S. | | |
| | | to Admiral Shelton | S. side of Comus Blvd. N.S. | |
| | Fire Hydrants | | | |
| | as reqd & other | | | |
| | improvements | | | |
| | | | | |
| | | | | |

This instructional Information may be deleted from official listings

* Types may include Arterial Paving, Residential Paving, Water Line, Sanitary Sewer, Storm Sewer, Drainage Channel, Sidewalks, and Retaining Walls. Any non-standard design or waivers must be clearly described in this listing.

Use additional sheets as necessary to complete the listing. The final page must be signed by the preparer and provide signature spaces for DRB members, as illustrated below.

Prepared by: Terri Pereira
Print Name T. Pereira
Firm Sanders Pereira Jr. & Assoc.

Page ___ of ___

Development Review Board Member Approvals

Traffic 3-4-86 Date
WRD 3/4/86 Date
Parks & Rec. 3-4-86 Date
DRB Chairman 3/4/86 Date
City Engineer/MAFCD 3/5/86 Date

Rev. 8/85 (ID2602E)

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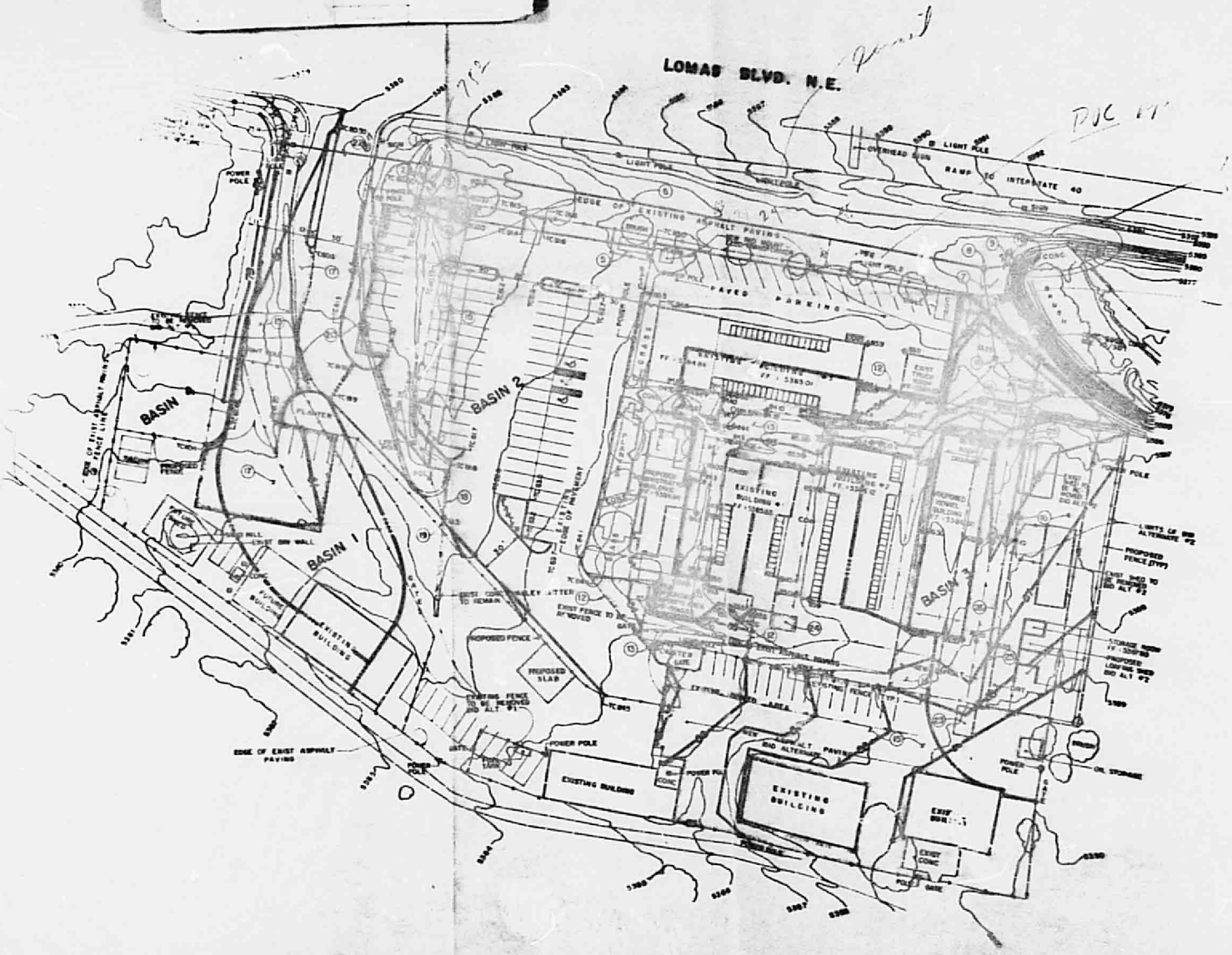

K20/D33

Santiago Romero, Jr. & Associates, Inc.
ENGINEERING • SURVEYING
ph. (505) 345-2733 (505) 344-6828

La Chamisa Compound
2828 12th St. N.W. Suite B
Albuquerque, New Mexico 87107

Job No. 85-38

To: Mr. Fred Aguirre, P.E.
3rd Floor
City Hall

RECEIVED
OCT 21 1986
HYDROLOGY SECTION

REF: Garcia Toyota Plat

Dear Fred:

Della Gallegos called to say that the attached plat was O.K. for your signature. Tom Mann & Assoc. have obtained all they can at this time with regards to the platting for Tract No. 1. The City has not been able to obtain a Quit Claim Deed from the N.M.S.H.D. for the vacated Herndon St. N.E., therefore Tom Mann & Assoc. have not been able to file their plat.

If you have any questions please call.

Let us know when you've signed the plat and I'll have someone go by and take it to Planning for Mr. Dineens signature and filing.

Sincerely,
SANTIAGO ROMERO JR., AND ASSOCIATES INC.

Thomas A. Romero, C.E.T.
Vice-President

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

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

March 31, 1986

Bob Sheppard
Flatow, Moore, Bryan & Assoiates
5608 Zuni Road, SE
Albuquerque, New Mexico 87108

RE: DRAINAGE PLAN FOR GARCIA TOYOTA RECEIVED MARCH 27, 1986
(K-20/D33)

Dear Mr. Sheppard:

The above referenced plan, dated March 26, 1986, is approved for Building Permit sign-off.

Prior to final Certificate of Occupancy sign-off by Hydrology, the following information needs to be finalized.

1. Letter from representative of the golf course, which permits the storm drain in their property.

2. Submittal of an approved S.D. #19 for the storm drain in the public right-of-way.

3. Submittal of drainage covenants for maintenance responsibility of the storm drain.

4. Submittal of private drainage easement for the storm drain on the east side of the property.

5. Submit the storm drain hydraulic grade line table.

If you have any questions regarding these requirements, call me at 766-7644.

Cordially,

Carlos A. Montoya

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

CAM/bsj

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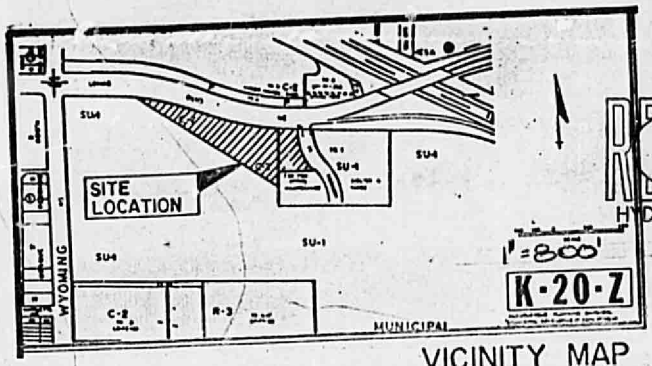
# CITY OF ALBUQUERQUE

## DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY




VICINITY MAP

RECEIVED
SEP 03 1986
HYDROLOGY SECTION

LEGAL DESCRIPTION: A PORTION OF TRACT NO.4 OF THE MUNICIPAL ADDITION NO.2

BENCH MARK: SOUTHEAST CORNER OF HERNDON ST. AND LOMAS BLVD. N.E., A CHISELED "□" ON TOP OF CURB (STATION 4 K20), ELEVATION 5380.954.

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
2961
MAX FLATOW

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 City of Albuquerque Interim 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 MAJOR ARTERIAL street use.

K20-D33 F-56

| APPROVALS | NAME | DATE | TITLE: |
|---|---|---|---|
| | | | |

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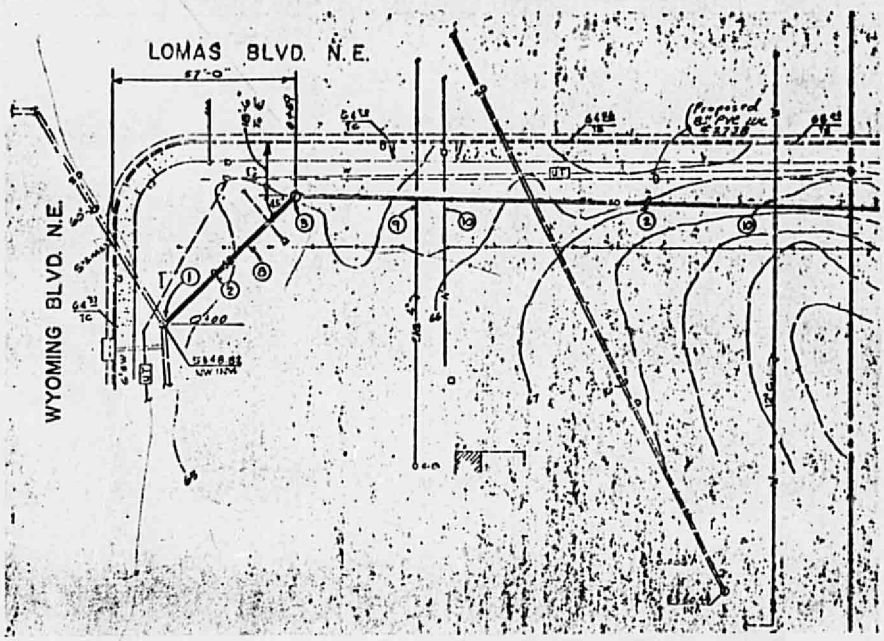
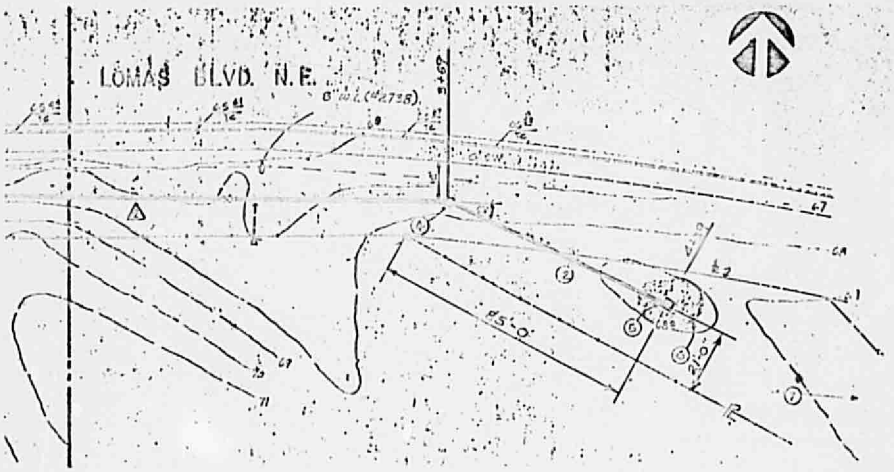
# CITY OF ALBUQUERQUE

## DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY




STORM DRAIN PLAN

1"=40'-0"

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
2561
MAX FLATOW

| APPROVALS | NAME | DATE | TITLE: STORM DRAIN |
|---|---|---|---|
| A.C.E./DESIGN | | | |
| INSPECTOR | | | |

flatow
moore
bryan &
associates

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

ARCHITECTS
ENGINEERS
PLANNERS

5608 zuni s.e.
albuquerque
new mexico
(505) 268-6783

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

March 26, 1986

Design Hydrology Section
City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103

Attention: Mr. Carlos Montoya

Re: Garcia's Honda Drainage Report

Dear Carlos:

I have reviewed your comments for the Garcia's Honda drainage report and will reply in the order of your letter.

1. The site grading plan, C-4, has been updated to show the drainage systems and references to additional sheets.

2. The following items pertain to Sheet C-4A.

2A. Preliminary review of the sytem as shown on C-4A has been completed by Engineering. A letter from the Owner is requested to confirm that this will be a private system.

2B. Maintenance responsibility will be by the Owner as per 2A above.

2C. The hydraulic grade line has been added to the drawing. The computations are an addendum to the original report.

2D. A section of the single "D" inlet showing the dumped riprap erosion control has been added to the drawing.

2E. It is my understanding that the storm drain system is to remain a private system with maintenance the responsibility of the Property Owner. The portion in the Lomas R.O.W. is covered for construction by the S.O. #19 order therefore, I do not believe an easement is required.

3. The following items pertain to the sheet dated 3-13-86 which has been titled "Offsite Drainage Control" and numbered C-5.

3A. The sheet has been redrawn at a scale of 1"-20'.

3B. Calculations for the hydraulic grade line are included as an addendum to the original report.

3C. There is no seeded area other than the required landscaping on Herndon R.O.W.

3D. The 18" RCP is part of a system for the Animal Control Center and is presently under construction.

3E. We have retained the services of a licensed surveyor to create the required dedicated easement for the 10" drain when the line is approved by your department.

Very truly yours,

Flatow, Moore, Bryan, Shaffer, McCabe, Inc.

Bob Sheppard

Bob Sheppard

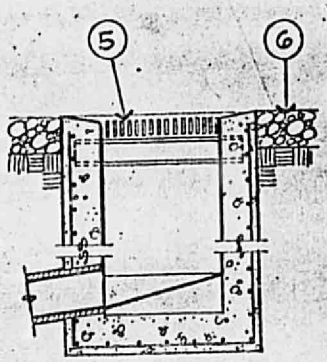
BS:jss
YY.4/37

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. NEW 24" RCP TO ENTER EXISTING MH AT INVERT ELEVATION = 5355.11. PLACE 1' LONG X 1' DEEP CONCRETE COLLAR AROUND PIPE.
2. INSTALL 24" RCP. TRENCH COMPACTION = 90%.
3. CONSTRUCT TYPE "E" MANHOLE PER CITY STD. DWG. S-2 INVERT = 5355.70. RIM = 5364.7.
4. CONSTRUCT TYPE "E" MANHOLE PER DWG. S-2. INVERT = 5359.30. RIM = 5366.7.
5. CONSTRUCT STORM INLET, SINGLE "D" PER CITY STD. DWG. K-6. INVERT = 5360.26 GRATE = 5367.00.
6. 8 CU. YDS. OF DUMPED RIPRAP. 8" DEPTH.
7. SEE SHEET C-4 FOR CONTINUATION OF GRADING.
8. REMOVE AND REPLACE EXISTING GOLF COURSE FENCE.
9. PROTECT EXISTING SEWER LINE. DEPTH UNKNOWN.
10. PROTECT EXISTING WATER LINE. DEPTH UNKNOWN.




SECTION
no scale

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
2761
MAX FLATOW

BRADBURY & STONE

CITY OF ALBUQUERQUE

| APPROVALS | ENGINEER | DATE | TITLE: |
|---|---|---|---|
| A.C.E. DESIGN | | | |
| WATER RESOURCES | | | |

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GARCIA TOYOTA ZONE ATLAS/DRNG. FILE #: K-20/D33

LEGAL DESCRIPTION:

CITY ADDRESS: 8800 LOMAS N.E.

ENGINEERING FIRM: CONTACT:

ADDRESS: PHONE:

OWNER: SHEILAH P. GARCIA CONTACT: SHEILAH GARCIA

ADDRESS: P.O. BOX 6609 - ZIP 87197 PHONE: 884 1221

ARCHITECT: FLATOW, MOORE, BRYAN & ASSOC. CONTACT: BOB SHEPARD

ADDRESS: 5608 ZUNI S.E. PHONE: 268 6783

SURVEYOR: SANTIAGO ROMERO & ASSOC. CONTACT: TOM ROMERO

ADDRESS: 2828 12TH ST. N.W. PHONE: 345 2733

CONTRACTOR: CONTACT:

ADDRESS: PHONE:

RECEIVED FEB 14 1986 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: 2/14/86

BY: [signature]

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GARCIA HONDA ZONE ATLAS/DRNG. FILE #: K-20/33

LEGAL DESCRIPTION: PORTION OF TRACT 4 LOS ALTOS GOLF COURSE

CITY ADDRESS: 9100 LOMAS N.E.

ENGINEERING FIRM: FLATOW MOORE BRYAN CONTACT: BOB SHEPARD

ADDRESS: 5608 ZUNI SE PHONE: 2686783

OWNER: IMPORTS LIMITED INC. CONTACT:

ADDRESS: PHONE:

ARCHITECT: FLATOW, MOORE, BRYAN CONTACT: JOE ALMERS

ADDRESS: 5608 ZUNI SE PHONE: 2686783

SURVEYOR: ROMERO & ASSOC. CONTACT: TOM ROMERO

ADDRESS: PHONE: 3452733

CONTRACTOR: CONTACT:

ADDRESS: PHONE:

RECEIVED DEC 18 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: 12/18/85

BY: [signature]

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

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: K-20 DATE: 12-12-85

PLANNING DIVISION NOS: EPC: _____ DRB: _____

SUBJECT: Garcia's Honda

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: Portion of Tract 4, Los Altos Golf Course

APPROVAL REQUESTED:

| | | | |
|---|---|---|---|
| ____ | PRELIMINARY PLAT | ____ | FINAL PLAT |
| ____ | SITE DEVELOPMENT PLAN | X | BUILDING PERMIT |
| X | OTHER Foundation Permit | ____ | ROUGH GRADING |

| | WHO | REPRESENTING |
|---|---|---|
| ATTENDANCE: | Fred J. Aguirre | City Engineer |
| | Joe Almers | Flatow Moore Bryan & Assoc. |
| | Bob Sheppard | Flatow Moore Bryan & Assoc. |

FINDINGS:

1. An approved drainage plan will be required prior to Building Permit release.
2. Conceptual grading and drainage plan required for "Foundation Only".
3. Two options available for discharge from site, they are:
   A. 100% ponding with pump discharging to Lomas or
   B. Obtain drainage easements across Golf Course to drain to Wyoming
      a. Also need covenant for maintenance responsibilities of easement or pumping scheme.
   C. Free discharge available for option "B" if discharge is into the 60" S.D. in Wyoming.
4. Replatting action needs to be completed prior to final C.O. release.

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: _____ SIGNED: _____

TITLE: _____ TITLE: _____

DATE: 12/12/85 DATE: _____

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

x ·tro


# City of · Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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


February 20, 1986

Bob Sheppard
Flatow Moore Bryan & Associates
5608 Zuni Road, SE
Albuquerque, New Mexico 87108

RE: DRAINAGE PLAN FOR GARCIA TOYOTA
RECEIVED FEBRUARY 14, 1986 FOR BUILDING PERMIT APPROVAL
(K-20/D33)

Dear Mr. Sheppard:

With respect to your drainage plan, dated February 6, 1986, Fred Malone of the Environmental Health & Energy Department, and Anthony Lopez of the Transportation Department, Street Maintenance Division, have raised concerns regarding the proposed treatment of off-site storm runoff.

Since concurrence is required from these departments for approval of your drainage plan, it is advisable that a meeting be scheduled to discuss their concerns. I will contact you to schedule such a meeting within the next week.

If you have any questions, call me at 766-7644.

Cordially,

Fred J. Aguirre

Fred J. Aguirre, P.E.
Design Hydrologist

cc: Fred Malone
Anthony Lopez

FJA/bsj

D.R.B. Case No. 86-41
D.R.C. Project No. _____
Date Submitted _____

RECEIVED
MAR 06 1986
HYDROLOGY SECTION

K20/D33

Figure 11

EXHIBIT "D"
to Subdivision Improvements Agreement

D.R.B. REQUIRED INFRASTRUCTURE LISTING
for Garcia Honda

Following is a summary of Public/Private Infrastructure required to be constructed or financially guaranteed to be constructed for the above development.

| Size | *Type Improvement | Location | From | To |
|---|---|---|---|---|
| 8" | Watermain | ~~Wyoming~~ Blvd NE. | | |
| | | to Aurora Shelter, | s. side of Lomas Blvd. NE | |
| | Fire Hydrants | | | |
| | as reqd & other | | | |
| | appurtenances | | | |
| | | | | |
| | | | | |

This instructional Information may be deleted from official listings

* Types may include Arterial Paving, Residential Paving, Water Line, Sanitary Sewer, Storm Sewer, Drainage Channel, Sidewalks, and Retaining Walls. Any non-standard design or waivers must be clearly described in this listing.

Use additional sheets as necessary to complete the listing. The final page must be signed by the preparer and provide signature spaces for DRB members, as illustrated below.

Prepared by: Tom Romero
Print Name T. Romero
Firm Santiago Romero Jr. & Assoc.

Page ___ of ___

Development Review Board Member Approvals

Traffic — Date 3-4-86
WRD — Date 3/4/86
Parks & Rec. — Date 3-4-86
DRB Chairman — Date 3/4/86
City Engineer/AMAFCA — Date 3/4/86

Rev. 8/85 (ID2602E)

ATTN! FRED

DRAINAGE INFORMATION SHEET

PROJECT TITLE: GARCIA TOYOTA ZONE ATLAS/DRNG. FILE #: K.20 D.33

LEGAL DESCRIPTION:

CITY ADDRESS: 8300 LOMAS N.E

ENGINEERING FIRM: CONTACT:

ADDRESS: PHONE:

OWNER: CONTACT:

ADDRESS: PHONE:

ARCHITECT: FMBSM CONTACT: JOE ALMERS

ADDRESS: 5608 ZUNI SE. PHONE: 2686783

SURVEYOR: CONTACT:

ADDRESS: PHONE:

CONTRACTOR: CONTACT:

ADDRESS: PHONE:

RECEIVED
MAR 13 1986
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: 3/13/86

BY: [signature]

# CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

INTER-OFFICE CORRESPONDENCE March 18, 1986 REF. NO._____

TO: Fred Aguirre, Hydrology

FROM: Anthony Lopez, Street Maintenance Engineer

SUBJECT: Drainage Plan for Satellite No 1

The proposed plan for the elimination of the ponding problem at our Satellite No. 1 Maintenance Yard, seems to be the ideal solution, but several concepts must be addressed before implementation. First, is the area intended to be drained adequately served by the placement of the drop inlet at the designated location? Second, is the ten-inch pvc culvert of sufficient size to provide said service? Third, it is felt that a drainage easement must be in, in order for th pvc culvert to cross under the parking lot. Last, the drainage permit has been approved by the NMSHD but has been rejected by the FHWA so an alternative must be sought for the drainage tie-in on State Right-of-way.

AL/sgt

RECEIVED
MAR 24 1986
HYDROLOGY SECTION

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

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

March 20, 1986

Mr. Bob Sheppard
Flatow, Moore, Bryan & Associates
5608 Zuni Road SE
Albuquerque, NM 87108

RE: DRAINAGE PLAN FOR GARCIA TOYOTA (K20-D33) RECEIVED MARCH 13, 1986

Dear Mr. Sheppard:

I have reviewed the referenced plan and forward the following comments:

1. Please update the C-4 site grading plan. The drawing should include storm drain systems and ponding areas.

2. The following items need to be addressed pertaining to drawing C-4A.

   A. Require an S.O. #19 for work in the public R/W.

   B. Need a drainage covenant for the storm drain system for maintenance responsibility.

   C. Need a hydraulic grade line on the profile view. Also, the table and calculations need to be submitted.

   D. Please submit a section of the inlet and dumped rip-rap.

   E. Require a drainage easement for the storm drain system.

3. The following comments pertain to the drawing dated 3-13-86.

   A. Please use an appropriate engineer scale.

   B. Please submit hydraulic grade line and calculation for the storm drain.

   C. Please address where the seeded area is located.

D. Please address when the 18" RCP is going to be constructed. Please identify interim measures if the 18" RCP is not in place.

E. Easements will be required for the storm drain system.

If you should have any questions, please feel free to contact me at 766-7644.

Sincerely,

Carlos A. Montoya

Carlos A. Montoya, P.E.
City/County Flood Plain Admin.

CAM:mrk