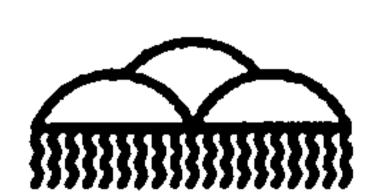
Tim Eichenberg, Chairman Danny Hemandez, Vice Chairman Bruce M. Thomson, Secretary-Treasurer Ronald D. Brown, Assistant Secretary-Treasurer Daniel F. Lyon, Director

> Jerry M. Lovato, P.E. Executive Engineer



Albuquerque Metropolitan

Arroyo

Flood

Control

Authority

2600 Prospect N.E., Albuquerque, NM 87107 Fax: (505) 884-0214 Phone: (505) 884-2215

Website: www.amafca.org

May 21, 2013

Ms. Genny Donart, P.E. Isaacson & Arfman, P.A. 128 Monroe St. NE Albuquerque, NM 87108

Via E-mail

Re:

The Foothills Development by Pino Dam, ZAP E-22

Dear Ms. Donart:

When we started discussion of the referenced project last year, AMAFCA had hoped to use the most current approved data for the Pino Dam. However, it does not appear that the information will be forthcoming. Executive Engineer Jerry Lovato spoke to Dr. Galbreth last week about an adjacent project to Mr. Mechenbier's project. It was hoped that Dr. Galbreth's project would provide updated information that would be reviewed and approved by the Office of the Sate Engineer, Dam Safety Bureau (OSEDSB). This information has not been reviewed and approved by the OSEDSB to date; it is likely that this work will not be completed before the end of the calendar year. Since we do not intend to delay development any further, AMAFCA will review each development as separate projects.

For design of the improved Pino Arroyo, you may use the current 100-year flow rate of 4,225 cfs or the Flood Insurance Study rate of 4,424 cfs if you cannot provide backup information to FEMA for the lower flow rate. The other option is to re-evaluate the dam inflow. BHI ascertained that the AHYMO model and sparse development in the upstream watershed led to a significantly lower flow rate. Since the arroyos draining into the dam have not been diverted, I think the drainage basin will be fairly easy to re-create from USGS topo maps or other available topography.

The grading for the improved channel will still need to tie between the two properties and the box culverts at Tramway Boulevard. You will also need to show that the existing concrete rundown into the Pino Dam pool will provide adequate erosion protection.

Building pads for the development shall be filled to one foot above the existing PMP dam pool elevation. Because the design will include modifications within the Pino Dam Pool, AMAFCA will be required to send the design to the OSEDSB for review and approval. Compensatory ponding volume will be required for the fill volume in the PMP pool. You will need to provide information to AMAFCA that is outlined in the rules and regulations governing dam design, construction and dam safety, including, but not limited to, a new stage storage curve for the Pino Dam. In addition, you will need to provide a filing fee of \$25 for the application for the permit to alter or rehabilitate a dam reservoir. The application is required to obtain approval for construction when the proposed construction will not change the properties of the dam or reservoir. If the design of the project is deemed to affect the Pino Dam, then an additional review fee of \$2 per \$1000 of estimated construction cost will be required by the OSEDSB unless a waiver has been granted by the State Engineer.

Executive Engineer Lovato will update the Board on this revised approach, and a revised turnkey agreement will be presented to the Board for consideration of approval at a future meeting.

If you have any questions, please call me at 884-2215.

Sincerely, AMAFCA

Lynn M. Mazur, P.E., C.F.M.

Development Review Engineer

Zymn M. Mazin

C: Jerry Lovato, AMAFCA Executive Engineer Curtis Cherne, City Hydrology

Cherne, Curtis

From: Genny Donart [gennyd@iacivil.com]

Sent: Tuesday, May 14, 2013 8:39 AM

To: Cherne, Curtis

Subject: FW: Pino Arroyo/Dam at Mechenbier property (Foothills)

Hi Curtis,

Figured I'd keep you in the loop on Mr. Mechenbier's project. See below.

Genny Donart, P.E. Registered Engineer

Isaacson & Arfman, P.A.

Consulting Engineering Associates 128 Monroe St. N.E. Albuquerque, NM 87108

Phone: (505)268-8828 Fax: (505)268-2632 gennyd@iacivil.com

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From: Lovato, Jerry [mailto:jlovato@amafca.org]

Sent: Monday, May 13, 2013 11:12 PM

To: Genny Donart Cc: Mazur, Lynn

Subject: RE: Pino Arroyo/Dam at Mechenbier property (Foothills)

Genny

Thank you for the information. We have a special meeting tomorrow, I will address your concerns and outline a procedure by Monday. Lynn will continue to be your POC on this matter.

Jerry

From: Genny Donart [mailto:gennyd@iacivil.com]

Sent: Monday, May 13, 2013 3:22 PM

To: Mazur, Lynn

Cc: Lovato, Jerry; Fred Arfman; John Mechenbier

Subject: Pino Arroyo/Dam at Mechenbier property (Foothills)

Good afternoon Lynn,

It's looking increasingly unlikely that we are going to get BHI's reports that were prepared for Dr Galbreath on the Pino Arroyo and the Pino Dam impound area.

Isaacson & Arfman would still be happy to use the currently approved (old) numbers for both the 100-year flow in the Pino and the dam PMF elevation. However, in our previous conversations with you we understood that we need to have coordinated the info with Dr. Galbreath's studies to get this through the AMAFCA board.

Can you please tell me what would be required by AMAFCA to proceed if we are unable to get these reports?

Genny Donart, P.E. Registered Engineer

Isaacson & Arfman, P.A.

Consulting Engineering Associates 128 Monroe St. N.E. Albuquerque, NM 87108 Phone: (505)268-8828

Fax: (505)268-2632 gennyd@iacivil.com

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How would Epat tout work af

Ferm of Shows are less than the loog with stem?

Item 16

Item 16

To: Board of Directors

From: Lynn Mazur, Development Review Engineer

Date: December 7, 2012

Re: Proposed Development by Pino Dam and Proposed Turnkey Agreement for Pino

Arroyo Improvements

Tract N-3-A is east of the Pino Dam pool, south of San Antonio Drive and west of Tramway Boulevard (see Location Map). AMAFCA does not own the dam pool in fee but possesses three separate and overlapping drainage easements. Page 3 of the 2010 bulk land plat for the project area is attached for reference. It shows the easements. I have also included an enlargement of the easement descriptions.

AMAFCA staff has met several times with the owner of Tract N-3-A, John Mechenbier (dba Americus, LLC), and his engineer, Fred Arfman, to discuss development of the property. Channelization of the Pino Arroyo, a Letter of Map Revision (LOMR) to reduce the 100-year floodplain and AMAFCA maintenance of the channel were part of early discussions. Mr. Mechenbier intends to construct the channel, submit the LOMR to FEMA and replat the property for sale to potential developers.

Since the initial meetings, Dr. William Galbreth, the property owner to the west, has presented a plan to develop his property next to the emergency spillway of the dam. The engineering study for his project revealed some important facts:

- 1. The original 1977 Probable Maximum Precipitation (PMP) design flow over the Pino Dam spillway was estimated to be 32,000 cfs. The current engineering study estimates an overflow rate of 26,500 cfs.
- 2. The dam embankment has the potential to fail in the PMP 6-hour storm event.
- 3. The 100-year flow rate into the dam is lower than previously calculated due to less impervious development in the upper watershed. The flow rate reduced from 4,400 cfs to 3,500 cfs.

Staff is working with Dr. Galbreth to obtain the engineering study prepared for his development. It will be beneficial to all parties to use the updated hydrologic and hydraulic information to create one cohesive study that will marry his and Mr. Mechenbier's projects together.

Mr. Mechenbier has a buyer interested in the portion of the tract north of the arroyo, and he is ready to proceed with plans for the arroyo improvements. Staff recently met with him and Mr. Arfman to make sure they understand the challenges and implications of developing next to the Pino Dam. The following items were discussed:

Construction Fill within the PMP Dam Pool

The proposed development will require some fill within the existing PMP dam pool. Building pads will be at or above this elevation, which is beyond what is required by the City of Albuquerque Drainage Ordinance. Compensatory ponding for the PMP volume will be provided elsewhere on Tract N-3-A. We may allow parking and landscaping areas within the PMP limit, but no buildings will be allowed.

Construction of Pino Arroyo Improvements

The constructed channel will be a concrete trapezoidal section that will connect to the box culverts at Tramway on the east and the existing concrete rundown to the dam pool on the west. The primary AMAFCA maintenance road will be on the south side. Storm drain connections from the north and south will convey flow from adjacent properties through water quality manholes or ponds to the channel. The attached Drainage Infrastructure Exhibit shows the channel alignment through the tract.

Quitclaim / Release of Easements, Grant of Easement and Right-of-Way Dedication
To clean up the easements on Tract N-3-A, staff recommends quitclaim / release of the
three existing AMAFCA easements and grant of one new drainage easement whose limit
will be one foot above the existing PMP pool elevation. Staff feels that this will be
enough easement to ensure that the Pino Dam will function properly without inundating
private property. This action will require a replat through the City's Development Review
Board process. Also with the replat, sufficient right-of-way will be granted to AMAFCA
for the channel and maintenance roads.

Letter of Map Revision

The FEMA floodplain is shown in green on the attached Location Map. It has not changed from the 1983 FEMA mapping and covers not only the dam pool but also the old Pino Arroyo floodplain. Updated hydrologic information and channelization of the arroyo will reduce most of the floodplain area on Tract N-3-A. The revised channel floodplain will tie into the backwater floodplain from the dam.

The replat will include a note identifying the existing FEMA floodplain. It is AMAFCA's policy to hold the Quitclaim Deed for recording until the LOMR is received from FEMA, and we will do the same with this development.

This item is presented for information. Mr. Mechenbier and Mr. Arfman will be present at the meeting to introduce the project. If the Board agrees to proceed, I will present the draft Turnkey Agreement at the January 2013 meeting.

Request: Board input on the proposed development and concurrence to proceed with a draft Turnkey Agreement for Pino Arroyo Improvements.

Location Map ZAP E-22

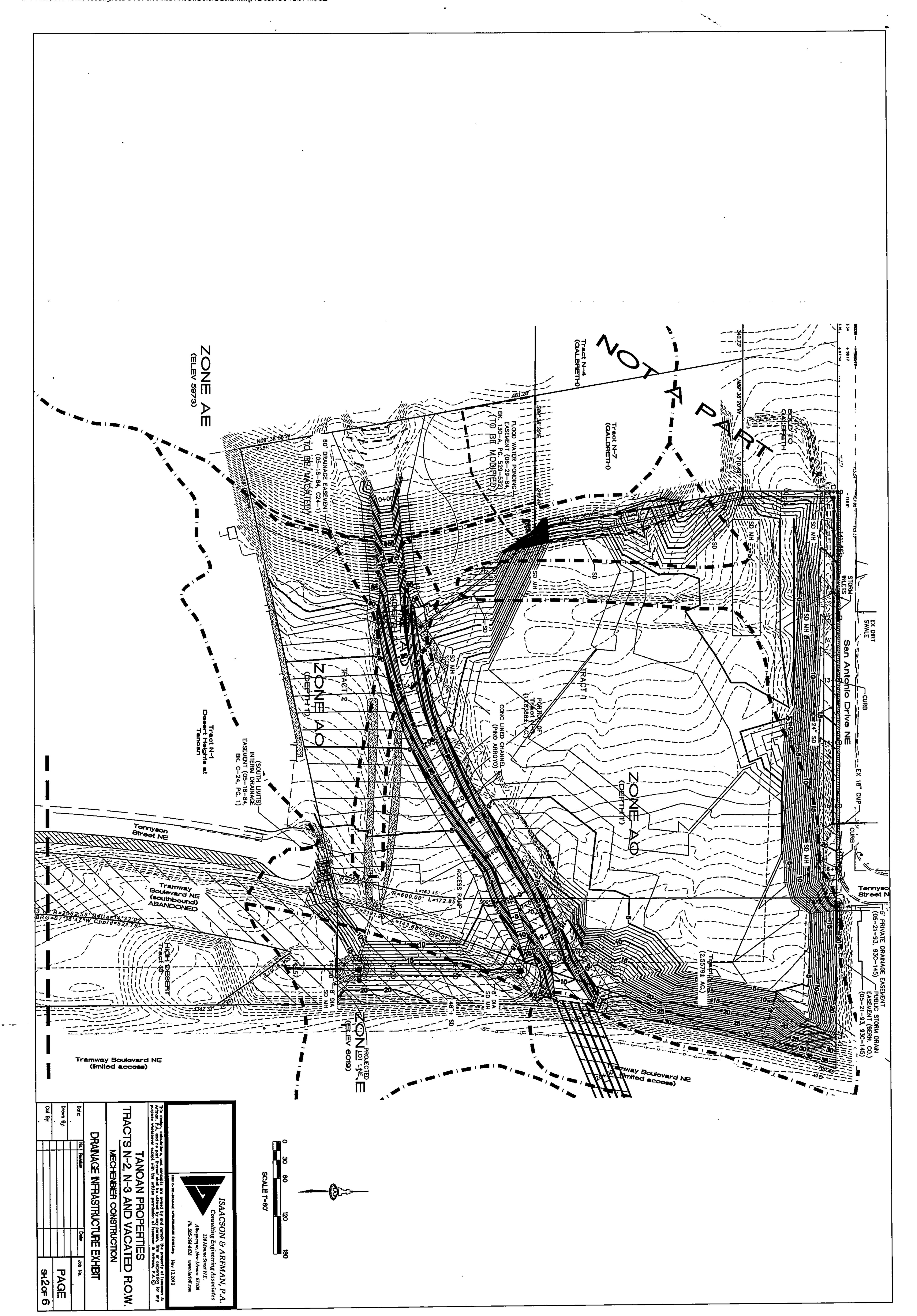


Bulk Land Plat Tracts N-3-A & N-7-A Existing Easements Tanoan Properties Being a Replat of Tract's N-3, N-4 & N-7 Revision Plat of Tanoan Properties Projected Section 27, T11N, R4E, NMPM Elena Gallegos Grant City of Albuquerque Bernalillo County, New Mexico San Antonio Drive NE November 2010 Curve Table Delta Chord Direction Chord Length 430.61 449.02 54° 55' 46" N63° 02' 53"W 108.43 | 449.02 | 13° 50° 11° | N42° 29' 35"W | S89* 47' 35"W Line Table 4.04 N01° 07' 34'E 30.00 N89* 18' 16"E L3 97.87 N35*34'33*W 23.41 N00* 11' 17"W L6 60.15 N09 11 17 W L=152.33'---N89' 29' 44'W 330.02 L7 30.00 369° 34° 18°E CH BRG=N85'08'30"W LB 20.00 S80° 34' 18°E Chord=145.78' L9 | 110.00 | 300° 07' 42°E ① 20' Prescriptive Sewer Line Essement as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37. L10 | 110.00 | 800° 07' 42°E 2 150' PNM Easement as shown on Revision Plat of Tancan Properties filed May 7, 1985, 14.82 | S89° 40' 60°E Book C27, Page 37. R#600.001 L13 337.88 809° 34' 34"E (3) 150' PNM Essement filed August 10, 1956, Book D 359, Page 276. CH BRG*N8*39'52"E L14 14.82 389° 40' 50°E Chord=172.26' (4) Easement No. 4 as shown on Revision Piet of Tanoan Properties filed May 7, 1985, Book C27, Page 37. (Spillway Easement filed March 17, 1978, Book Misc. 595, Pages 221-223) L15 29.83 N35° 34° 33°W 20' sewer line easement and 30' sewer line construction easement covered by easement L=65.86' R=2231,90' Delta=01*41'27" encroachment agreement with PNM, filed February 26, 1979, Book Misc. 672, Page 664 and filed February 28, 1979, Book Misc. 673, Page 179. CH BRG=\$16*04'20'W 60° Drainage Easement as shown on Revision Plet of Tancan Properties filed May 7, 1985, Chord=65.86* Book C27, Page 37. 7 Interim Drainage Easement as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37. NOTE: SEE SHEET 2 FOR NOTICE OF SUBDIVISION PLAT CONDITIONS 8 Flood Water Ponding Exsement as shown on Revision Plat of Tancan Properties filed May 7, 1985, Book C27, Page 37. (Document filed June 29, 1984, Book Misc. 130A, Pages 529-532) ② Easement No. 1 as shown on Revision Piet of Tanoan Properties filed May 7, 1985, Book C27, Page 37. (Spillway Easement filed March 17, 1978, Book Misc. 595, Pages 224-227) Dublic Park Site Easement filed January 5, 1994, Book 94-1, Pages 3931-3934. DOCH 2011032927 04/05/2011 02:07 PM Page: 3 of 4 1tyPLAT R:\$22.00 8: 2011C P: 0031 N. Toulous Olivers, Bernalillo Cou Sheet 3 of 4

Easement Notes on Plat

- (1) 20' Prescriptive Sewer Line Easement as shown on Revision Piat of Tanoan Properties filed May 7, 1985, Book C27, Page 37.
- (2) 150' PNM Easement as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37.
- (3) 150' PNM Easement filed August 10, 1956, Book D 359, Page 275.
- 4) Easement No. 4 as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37. (Spillway Easement filed March 17, 1978, Book Misc. 595, Pages 221-223)
- (5) 20' sewer line easement and 30' sewer line construction easement covered by easement encroachment agreement with PNM, filed February 26, 1979, Book Misc. 672, Page 664 and filed February 28, 1979, Book Misc. 673, Page 179.
- *6) 60' Drainage Easement as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37.
- * 7 Interim Drainage Easement as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37.
- * Flood Water Ponding Easement as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37, (Document filed June 29, 1984, Book Misc. 130A, Pages 529-532)
 - (9) Easement No. 1 as shown on Revision Plat of Tanoan Properties filed May 7, 1985, Book C27, Page 37. (Spillway Easement filed March 17, 1978, Book Misc, 595, Pages 224-227)
 - (10) Public Park Site Easement filed January 5, 1994, Book 94-1, Pages 3931-3934,

*Easements 4, 6, 7, 8 and 9 were granted to AMAFCA. Only easements 6, 7 and 8 are on Tract N-3-A.



Cherne, Curtis

From:

Genny Donart [gennyd@iacivil.com]

Sent:

Monday, October 22, 2012 10:30 AM

To:

'Fred Arfman'; Cherne, Curtis

Subject:

RE: drainage easement from yesterdays discussion

Attachments: image004.jpg

Hi Curtis,

I apologize for not getting back to you sooner. The flows in that existing 48" line are 110 cfs according to the NMDOT as-builts.

Genny Donart, P.E. Registered Engineer



Isaacson & Arfman, P.A.

Consulting Engineering Associates 128 Monroe St. N.E. Albuquerque, NM 87108 Phone: (505)268-8828 Fax: (505)268-2632

gennyd@iacivil.com

From: Fred Arfman [mailto:freda@iacivil.com]
Sent: Monday, October 08, 2012 7:56 AM
To: 'Cherne, Curtis '; gennyd@iacivil.com
Cc: jmechenbier@mechenbier.com

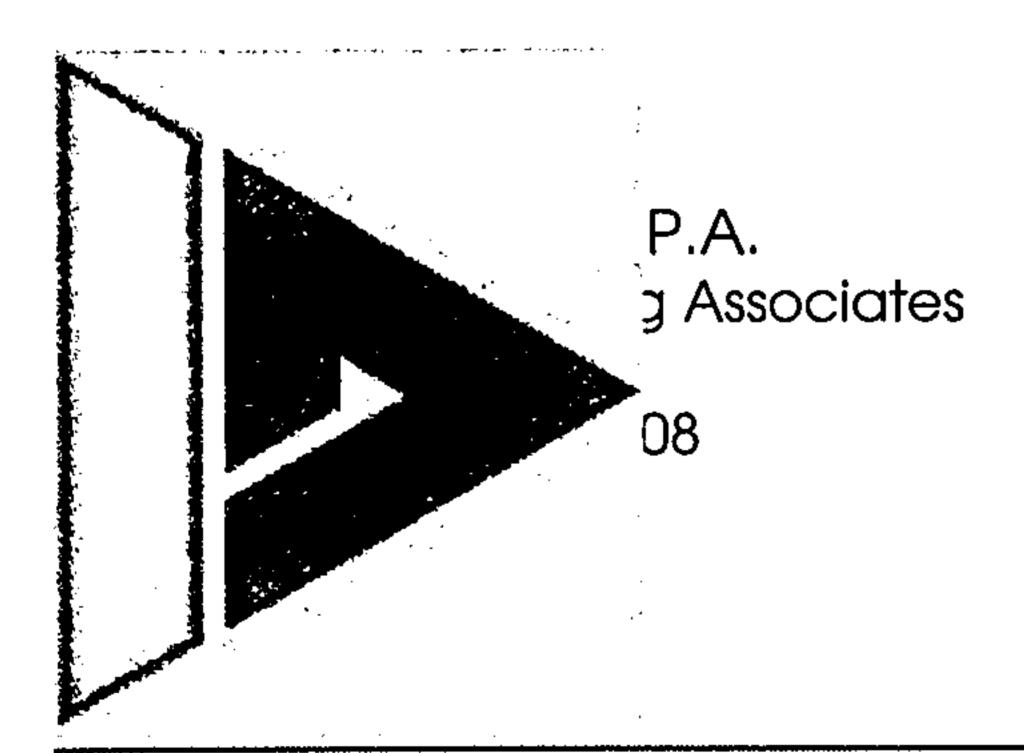
Subject: RE: drainage easement from yesterdays discussion

Curtis,

Thanks for the quick decision. We will provide you with the flow rate I today or tomorrow for the final determination.

Thanks,

Fred



From: Cherne, Curtis [mailto:CCherne@cabq.qov]

Sent: Thursday, October 04, 2012 1:06 PM To: Fred Arfman; gennyd@iacivil.com

Subject: drainage easement from yesterdays discussion

Fred/Genny,

The City could accept the proposed storm drain downstream of the 48" to the proposed channel near the southeast corner of the site since it is a 48" pipe under Tramway. It would be nice to know the flow. If it is only 10 cfs or so (supposed to be at least 50 cfs), it would not qualify.

Curtis