

# CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



November 7, 2013

Richard J. Berry, Mayor

Jeffrey Wooten, P.E.  
**Tierra West, LLC**  
5571 Midway Park Pl NE  
Albuquerque, NM 87109

**Re: Old Dominion Freight Line,  
330 Airport Rd NW  
Request for Permanent C.O. –Accepted  
Engineer's Stamp dated: 3-27-13, (K10D008A)  
Certification dated: 11-05-13**

**File: K10D008A**

Dear Mr. Wooten:

PO Box 1293

Based upon the information provided in your Grading and Drainage Certification received 11-05-2013, the **above referenced Certification is acceptable for release of a Permanent Certificate of Occupancy (C.O.) by Hydrology.**

Albuquerque

If you have questions, please email me at [grolson@cabq.gov](mailto:grolson@cabq.gov) or phone 505-924-3994.

New Mexico 87103

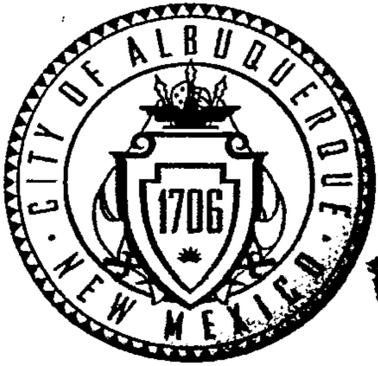
Sincerely,

 11/7/13

www.cabq.gov

Gregory R. Olson, P.E.  
Senior Engineer  
Development and Building Services

Orig: Drainage file **K10/D008A**  
c.pdf Addressee via Email [JWooten@TierraWestLLC.com](mailto:JWooten@TierraWestLLC.com)  
eC: Katrina Sigala, Planning - CO Clerk  
Francis Connor, Building Services



# City of Albuquerque

Planning Department

Development & Building Services Division

## RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Old Dominion Freight Line, Inc.

DRB#: 13DRB-70458

EPC#: \_\_\_\_\_

Work Order#: \_\_\_\_\_

City Drainage #: K10D008A

Legal Description: Tract B-1-B, Atrisco Business Park, Unit 1

City Address: 330 Airport Rd NW

Engineering Firm: Tierra West, LLC

Contact: Jeffrey T. Wooten, P.E.

Address: 5571 Midway Park Place NE, Albuquerque, NM 87109

Phone#: 505-858-3100

Fax#: 505-858-1118

E-mail: jwooten@tierrawestllc.com

Owner: Old Dominion Freight Line, Inc.

Contact: Jerry Canada

Address: 500 Old Dominion Way, Thomasville, NC 27360

Phone#: 317-494-1278

Fax#: \_\_\_\_\_

E-mail: jerry.canada@odfl.com

Architect: David Mollenkopf Architect

Contact: David Mollenkopf

Address: 209 10th Ave South, Suite 414, Nashville, TN, 37203

Phone#: 615-296-9146

Fax#: 615-733-0052

E-mail: djmollen@themdglc.com

Surveyor: Cartesian Surveys

Contact: Will Plotner

Address: PO Box 44414, Rio Rancho, NM 87124

Phone#: 505-896-3050

Fax#: 505-891-0244

E-mail: wplotnerjr@aol.com

Contractor: Schwob Building Company, LTD

Contact: Micah Davenport

Address: 2349 Glenda Lane, Dallas, TX 75229

Phone#: 972-243-7674

Fax#: 972-243-7710

E-mail: mdavenport@schwob.com

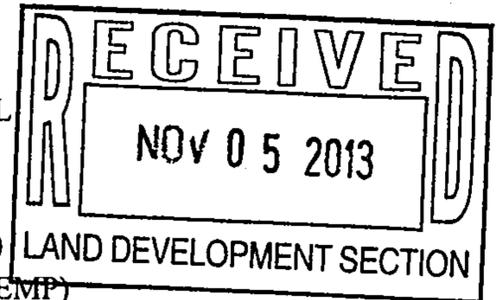
*Larry Cauffman*  
217-587-5683

### TYPE OF SUBMITTAL:

- DRAINAGE REPORT
- DRAINAGE PLAN 1st SUBMITTAL
- DRAINAGE PLAN RESUBMITTAL
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- EROSION & SEDIMENT CONTROL PLAN (ESC)
- ENGINEER'S CERT (HYDROLOGY)
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- ENGINEER'S CERT (TCL)
- ENGINEER'S CERT (DRB SITE PLAN)
- ENGINEER'S CERT (ESC)
- SO-19
- OTHER (SPECIFY)

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- SIA/FINANCIAL GUARANTEE RELEASE
- PRELIMINARY PLAT APPROVAL
- S. DEV. PLAN FOR SUB'D APPROVAL
- S. DEV. FOR BLDG. PERMIT APPROVAL
- SECTOR PLAN APPROVAL
- FINAL PLAT APPROVAL
- CERTIFICATE OF OCCUPANCY (PERM)
- CERTIFICATE OF OCCUPANCY (TCL TEMP)
- FOUNDATION PERMIT APPROVAL
- BUILDING PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- PAVING PERMIT APPROVAL
- WORK ORDER APPROVAL
- GRADING CERTIFICATION
- SO-19 APPROVAL
- ESC PERMIT APPROVAL
- ESC CERT. ACCEPTANCE
- OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED: \_\_\_\_\_

Yes  No \_\_\_\_\_

Copy Provided \_\_\_\_\_

DATE SUBMITTED: 11/5/13

By: Jeffrey T. Wooten, P.E.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

**Olson, Greg**

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**From:** Jeff Wooten [jwooten@tierrawestllc.com]  
**Sent:** Thursday, November 07, 2013 12:09 PM  
**To:** Olson, Greg; Ron Bohannan  
**Cc:** Sims, Timothy E.  
**Subject:** RE: 330 Airport Road NW - Old Dominion Freight Line - Drainage File: K10-D008A) -Hydrology release of Permanent C.O.

Greg,

The letter was not attached. I ended up coming into the office today so I will drop by in about an hour. No worries...I don't have anything contagious.

*Jeff Wooten, PE, LEED AP*

**Tierra West, LLC**

5571 Midway park Place, NE

Albuquerque, NM 87109

Office: (505) 858-3100

Cell: (505) 980-3560

[jwooten@tierrawestllc.com](mailto:jwooten@tierrawestllc.com)

[www.tierrawestllc.com](http://www.tierrawestllc.com)

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**From:** Olson, Greg [mailto:grobson@cabq.gov]

**Sent:** Thursday, November 07, 2013 11:45 AM

**To:** Jeff Wooten; Ron Bohannan

**Cc:** Olson, Greg; Sims, Timothy E.; Sigala, Katrina M.; Connor, Francis

**Subject:** 330 Airport Road NW - Old Dominion Freight Line - Drainage File: K10-D008A) -Hydrology release of Permanent C.O.

Jeff / Ron,

Attached is my letter accepting your Nov 5, 2013 Certification of Grading and Drainage on this site for Hydrology's release of the Permanent C.O.

I'm sorry to hear that you are out sick, today.

In support of the contractor's schedule, I have approved this plan with the following reservations.

I left you a telephone message regarding a couple questions that I would like you to address on the Certification Plan in our file.

1. The Phase 1 Curb along the south edge of the paving was shown on your 10/16 plan, but not on this plan. I would like you to annotate our file copy of the plan and initial the change to show this as-built condition.

11/12/2013

2. Similarly, the Rip-rap outfall at the south end of the east swale needs to be shown, dimensioned, annotated and initialed.

Please update this file record within a week.

If you have any questions, please email or call me.

Thanks,

*Greg Olson*, PE

Senior Engineer  
Planning - Hydrology  
505-924-3994

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If this email is spam, report it to [www.OnlyMyEmail.com](http://www.OnlyMyEmail.com)

# CITY OF ALBUQUERQUE



October 21, 2013

Jeffrey Wooten, P.E.  
**Tierra West, LLC**  
5571 Midway Park Pl NE  
Albuquerque, NM 87109

**Re: Old Dominion Freight Line,  
330 Airport Rd NW  
Request for 30-day Temporary C.O. –Accepted  
Engineer’s Stamp dated: 3-27-13, (K10D008A)  
Certification dated: 10-16-13**

Dear Mr. Wooten,

Based upon the information in your submittal received 10-16-13, the above reference plan is approved for a release of a 30-day Temporary Certificate of Occupancy by Hydrology.

PO Box 1293

When submitting for Permanent Certificate of Occupancy provide calculations that show the swale along the eastern property line has capacity since flows were diverted to this swale.

Albuquerque

If you have any questions, you can contact me at 924-3986.

New Mexico 87103

Sincerely,

Curtis A. Cherne, P.E.  
Principal Engineer—Hydrology Section  
Development and Building Services

[www.cabq.gov](http://www.cabq.gov)

C: CO Clerk—Katrina Sigala  
File  
e-mail



# City of Albuquerque

Planning Department

Development & Building Services Division

## RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Old Dominion Freight Line, Inc. City Drainage #: K10 D008A  
 DRB#: 13DRB-70458 EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
 Legal Description: Tract B-1-B, Atrisco Business Park, Unit 1  
 City Address: 330 Airport Rd NW

Engineering Firm: Tierra West, LLC Contact: Jeffrey T. Wooten, P.E.  
 Address: 5571 Midway Park Place NE, Albuquerque, NM 87109  
 Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: jwooten@tierrawestllc.com

Owner: Old Dominion Freight Line, Inc. Contact: Jerry Canada  
 Address: 500 Old Dominion Way, Thomasville, NC 27360  
 Phone#: 317-494-1278 Fax#: \_\_\_\_\_ E-mail: jerry.canada@odfl.com

Architect: David Mollenkopf Architect Contact: David Mollenkopf  
 Address: 209 10th Ave South, Suite 414, Nashville, TN, 37203  
 Phone#: 615-296-9146 Fax#: 615-733-0052 E-mail: djmollen@themdgllc.com

Surveyor: Surv-tek Contact: Russ Hugg  
 Address: 9384 Valley View DR. Suite 100, Albuquerque, NM 87114  
 Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: hugg@swcp.com

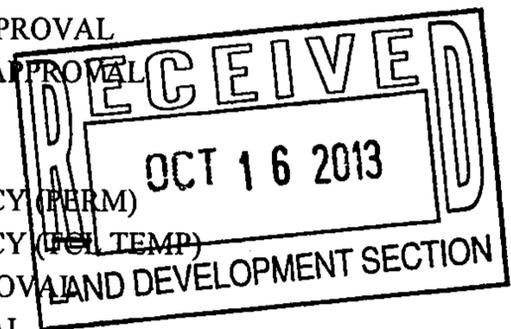
Contractor: Schwob Building Company, LTD Contact: Micah Davenport  
 Address: 2349 Glenda Lane, Dallas, TX 75229  
 Phone#: 972-243-7674 Fax#: 972-243-7710 E-mail: mdavenport@schwob.com

### TYPE OF SUBMITTAL:

- DRAINAGE REPORT
- DRAINAGE PLAN 1st SUBMITTAL
- DRAINAGE PLAN RESUBMITTAL
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- EROSION & SEDIMENT CONTROL PLAN (ESC)
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- S. DEV. PLAN FOR SUB'D APPROVAL
- S. DEV. FOR BLDG. PERMIT APPROVAL
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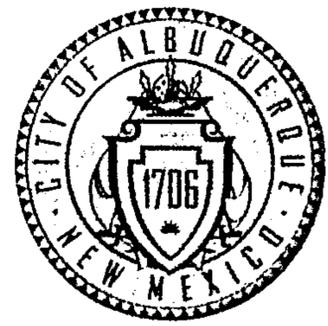


WAS A PRE-DESIGN CONFERENCE ATTENDED:  Yes  No  Copy Provided  
 DATE SUBMITTED: October 16, 2013 By: Jeffrey T. Wooten, P.E.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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# CITY OF ALBUQUERQUE



**Planning Department  
Transportation Development Services Section**

November 5, 2013

Jeffrey Todd Wooten, P.E.  
Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, NM 87109

Re: Certification Submittal for Permanent Certificate of Occupancy for  
Old Dominion Freight Lines (K-10/D008A)  
330 Airport Road NW  
Engineer's Stamp dated 11-05-13

Dear Mr. Wooten,

Based upon the information provided in your submittal received 11-05-13, Transportation Development has no objection to the issuance of a Permanent Certificate of Occupancy. This letter serves as a "green tag" from Transportation Development for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

If you have any questions, please contact me at (505)924-3630.

PO Box 1293

Sincerely,

Albuquerque

New Mexico 87103  
Nilo Salgado-Fernandez, P.E.  
Senior Traffic Engineer,  
Transportation Development Section  
Development and Building Services  
Planning Department

www.cabq.gov

C: File



# City of Albuquerque

Planning Department

Development & Building Services Division

## RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Old Dominion Freight Line, Inc. City Drainage #: KIDDO084  
 DRB#: 13DRB-70458 EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
 Legal Description: Tract B-1-B, Atrisco Business Park, Unit 1  
 City Address: 330 Airport Rd NW

Engineering Firm: Tierra West, LLC Contact: Jeffrey T. Wooten, P.E.  
 Address: 5571 Midway Park Place NE, Albuquerque, NM 87109  
 Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: jwooten@tierrawestllc.com

Owner: Old Dominion Freight Line, Inc. Contact: Jerry Canada  
 Address: 500 Old Dominion Way, Thomasville, NC 27360  
 Phone#: 317-494-1278 Fax#: \_\_\_\_\_ E-mail: jerry.canada@odfl.com

Architect: David Mollenkopf Architect Contact: David Mollenkopf  
 Address: 209 10th Ave South, Suite 414, Nashville, TN, 37203  
 Phone#: 615-296-9146 Fax#: 615-733-0052 E-mail: djmollen@themdgllc.com

Surveyor: Cartesian Surveys Contact: Will Plotner  
 Address: PO Box 44414, Rio Rancho, NM 87124  
 Phone#: 505-896-3050 Fax#: 505-891-0244 E-mail: wplotnerjr@aol.com

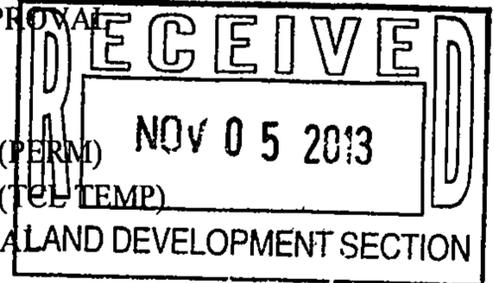
Contractor: Schwob Building Company, LTD Contact: Micah Davenport  
 Address: 2349 Glenda Lane, Dallas, TX 75229  
 Phone#: 972-243-7674 Fax#: 972-243-7710 E-mail: mdavenport@schwob.com

### TYPE OF SUBMITTAL:

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- DRAINAGE PLAN RESUBMITTAL
- CONCEPTUAL G & D PLAN
- GRADING PLAN
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- ENGINEER'S CERT (TCL)
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- SECTOR PLAN APPROVAL
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- CERTIFICATE OF OCCUPANCY (TCL TEMP)
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- BUILDING PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- PAVING PERMIT APPROVAL
- WORK ORDER APPROVAL
- GRADING CERTIFICATION
- SO-19 APPROVAL
- ESC PERMIT APPROVAL
- ESC CERT. ACCEPTANCE
- OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED:  Yes  No  Copy Provided

DATE SUBMITTED: 11/05/13 By: Jeffrey T. Wooten, P.E.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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gaw

# TIERRA WEST, LLC

November 5, 2013

Ms. Kristal Metro, P.E.  
Development and Building Services  
City of Albuquerque  
P.O. Box 1293  
Albuquerque, NM 87103

**RE: CERTIFICATION FOR PERMANENT CERTIFICATE OF OCCUPANCY FOR AA SITE  
PLAN FOR BUILDING PERMIT  
OLD DOMINION FRIEGHT LINES, 330 AIRPORT RD NW**

Dear Ms. Metro:

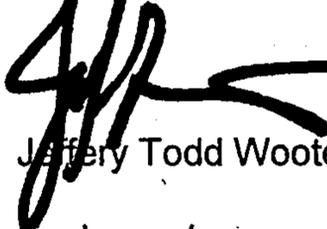
Tierra West LLC, on behalf of our client, requests issuance of the Permanent Certificate of Occupancy for the project referenced above. This project is in substantial compliance as inspected on November 5, 2013, and is in accordance with the design intent of the Approved Administrative Amended Site Plan for Building Permit dated 10/18/13. This certification is submitted in support of the request for Permanent Certificate of Occupancy to allow the owner to occupy the building. All punchlist items are complete.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the traffic aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Enclosed, please find the information sheet and the as-built Approved Administrative Amended Site Plan for Building Permit. Therefore, we request approval of the as-built Approved Administrative Amended Site Plan for Building Permit for a Permanent Certificate of Occupancy

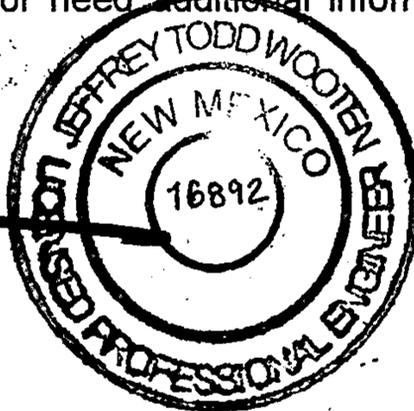
If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

Sincerely,



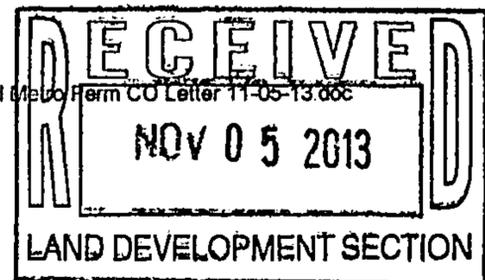
Jeffery Todd Wooten, P.E.

Enclosure/s



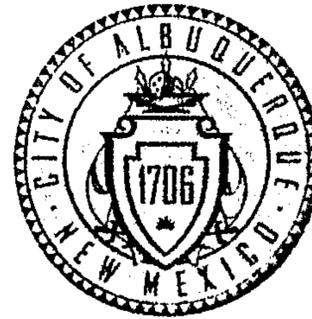
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JF/ RRB/bf

\\nas011zdrive1\2013\2013002\ODFL\Correspondence\2013002 Kristal Metro Perm CO Letter 11-05-13.doc



5571 Midway Park Place NE Albuquerque, NM 87109  
(505) 858-3100 Fax (505) 858-1118 1-800-245-3102  
tierrawestllc.com

# CITY OF ALBUQUERQUE



**Planning Department  
Transportation Development Services Section**

October 18, 2013

Jeffrey Todd Wooten, P.E.  
Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, NM 87109

Re: Certification Submittal for Permanent Certificate of Occupancy for  
Old Dominion Freight Lines (K-10/D008A)  
330 Airport Road NW  
Engineer's Stamp dated 10-16-13

Dear Mr. Wooten,

Based upon the information provided in your submittal received 10-16-13, Transportation Development has no objection to the issuance of a 120-day Temporary Certificate of Occupancy. This letter serves as a "green tag" from Transportation Development for a 120-day Temporary Certificate of Occupancy to be issued by the Building and Safety Division.

PO Box 1293

Sincerely,

Albuquerque

Nilo Salgado-Fernandez, P.E.  
Senior Traffic Engineer, Planning Dept.  
Development and Building Services

New Mexico 87103

C: File

www.cabq.gov

gaw

# TIERRA WEST, LLC

October 16, 2013

Ms. Kristal Metro, P.E.  
Development and Building Services  
City of Albuquerque  
P.O. Box 1293  
Albuquerque, NM 87103

**RE: CERTIFICATION FOR TEMPORARY CERTIFICATE OF OCCUPANCY FOR AA SITE  
PLAN FOR BUILDING PERMIT  
OLD DOMINION FRIEGHT LINES, 330 AIRPORT RD NW**

Dear Ms. Metro:

Tierra West LLC, on behalf of our client, requests issuance of the Temporary Certificate of Occupancy for the project referenced above. This project is in substantial compliance as inspected on October 15, 2013, and is in accordance with the design intent of the Approved Administrative Amended Site Plan for Building Permit dated ~~3/19/13~~ <sup>10/18/13</sup>. This certification is submitted in support of the request for Temporary Certificate of Occupancy to allow the owner to occupy for office installations and to finish the minor punchlist items as noted on the attached as-built Approved Administrative Amended Site Plan for Building Permit. All ADA parking is substantially complete.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the traffic aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Enclosed, please find the information sheet and the as-built Approved Administrative Amended Site Plan for Building Permit. Therefore, we request approval of the as-built Approved Administrative Amended Site Plan for Building Permit for a Permanent Certificate of Occupancy

If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

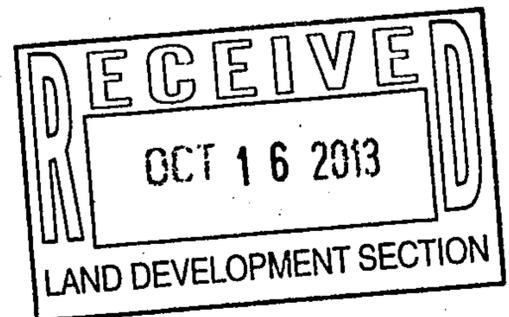
Sincerely,

Jeffery Todd Wooten, P.E.



Enclosure/s

JN: 2013002  
JF/ RRB/bf



5571 Midway Park Place NE Albuquerque, NM 87109  
(505) 858-3100 Fax (505) 858-1118 1-800-245-3102  
tierrawestllc.com



# City of Albuquerque

Planning Department

Development & Building Services Division

## RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Old Dominion Freight Line, Inc. City Drainage #: K10/00081A  
 DRB#: 13DRB-70458 EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
 Legal Description: Tract B-1-B, Atrisco Business Park, Unit 1  
 City Address: 330 Airport Rd NW

Engineering Firm: Tierra West, LLC Contact: Jeffrey T. Wooten, P.E.  
 Address: 5571 Midway Park Place NE, Albuquerque, NM 87109  
 Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: jwooten@tierrawestllc.com

Owner: Old Dominion Freight Line, Inc. Contact: Jerry Canada  
 Address: 500 Old Dominion Way, Thomasville, NC 27360  
 Phone#: 317-494-1278 Fax#: \_\_\_\_\_ E-mail: jerry.canada@odfl.com

Architect: David Mollenkopf Architect Contact: David Mollenkopf  
 Address: 209 10th Ave South, Suite 414, Nashville, TN, 37203  
 Phone#: 615-296-9146 Fax#: 615-733-0052 E-mail: djmollen@themdglc.com

Surveyor: Surv-tek Contact: Russ Hugg  
 Address: 9384 Valley View DR. Suite 100, Albuquerque, NM 87114  
 Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: hugg@swcp.com

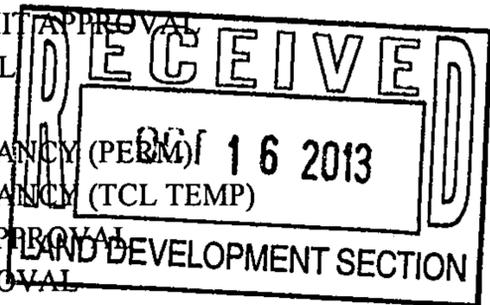
Contractor: Schwob Building Company, LTD Contact: Micah Davenport  
 Address: 2349 Glenda Lane, Dallas, TX 75229  
 Phone#: 972-243-7674 Fax#: 972-243-7710 E-mail: mdavenport@schwob.com

### TYPE OF SUBMITTAL:

- DRAINAGE REPORT
- DRAINAGE PLAN 1st SUBMITTAL
- DRAINAGE PLAN RESUBMITTAL
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- EROSION & SEDIMENT CONTROL PLAN (ESC)
- ENGINEER'S CERT (HYDROLOGY)
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- ENGINEER'S CERT (TCL)
- ENGINEER'S CERT (DRB SITE PLAN)
- ENGINEER'S CERT (ESC)
- SO-19
- OTHER (SPECIFY)

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- SIA/FINANCIAL GUARANTEE RELEASE
- PRELIMINARY PLAT APPROVAL
- S. DEV. PLAN FOR SUB'D APPROVAL
- S. DEV. FOR BLDG. PERMIT APPROVAL
- SECTOR PLAN APPROVAL
- FINAL PLAT APPROVAL
- CERTIFICATE OF OCCUPANCY (PERM)
- CERTIFICATE OF OCCUPANCY (TCL TEMP)
- FOUNDATION PERMIT APPROVAL
- BUILDING PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- PAVING PERMIT APPROVAL
- WORK ORDER APPROVAL
- GRADING CERTIFICATION
- SO-19 APPROVAL
- ESC PERMIT APPROVAL
- ESC CERT. ACCEPTANCE
- OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED:  Yes  No  Copy Provided

DATE SUBMITTED: October 16, 2013 By: Jeffrey T. Wooten, P.E.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

# CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development & Building Services



March 26, 2013

Ronald Ray Bohannon, P.E.  
Attn: Jeff Wooten, P.E.  
Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, New Mexico 87109

Richard J. Berry, Mayor

RE: **Old Dominion Freight Line - 330 Airport Road NW  
Grading & Drainage Plan and Drainage Report**

File **K10-D008A**  
PE Stamp: 3/19/13

Dear Mr. Bohannon,

Based upon the information provided in your submittal received 3/19/13, the above referenced plan cannot be approved for Grading Permit or Building Permit until the following issues are addressed:

1. Show the limits of the existing Special Flood Hazard Area (BFE = 5097) on the plan.
2. Include the stormwater pump model, size, and discharge rate on the plan, and thus include the As-Built pump information on the future, drainage Certification plan.
3. On sheet C5, the outlet structure inverts differ from those shown on the Grading Plan. Also, it does not show the 2" diameter, low flow ports that were shown on the previous submittal. Is the pond intended to retain two feet of water?
4. The plan and report do not include any channel section or capacity calculations for the North and East perimeter channels. The landscape plan shows numerous trees along the perimeter channel. Confirm that channel capacity is adequate for design flows.
5. Please include pond lining and channel mulch specs on the G&D, rather than just referring to the landscape plan. If landscaping requirements change, they must be reviewed and changed in the G&D.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

If you have any questions, please contact me at [grolson@cabq.gov](mailto:grolson@cabq.gov), or phone 505-924-3695.

Sincerely,

Gregory R. Olson, P.E.  
Senior Engineer

Orig: Drainage file K10-D008A  
c.pdf Addressee via Email: [RRB@TierraWestLLC.com](mailto:RRB@TierraWestLLC.com) & [JWooten@TierraWestLLC.com](mailto:JWooten@TierraWestLLC.com)



# City of Albuquerque

Planning Department

Development & Building Services Division

## RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Old Dominion Freight Line, Inc. City Drainage #: K10 D00 8A

DRB#: 13DRB-70458 EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: Tract B-1-B, Atrisco Business Park, Unit 1

City Address: 330 Airport Rd NW

Engineering Firm: Tierra West, LLC Contact: Jeffrey T. Wooten, P.E.

Address: 5571 Midway Park Place NE, Albuquerque, NM 87109

Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: jwooten@tierrawestllc.com

Owner: Old Dominion Freight Line, Inc. Contact: Jerry Canada

Address: 500 Old Dominion Way, Thomasville, NC 27360

Phone#: 317-494-1278 Fax#: \_\_\_\_\_ E-mail: jerry.canada@odfl.com

Architect: David Mollenkopf Architect Contact: David Mollenkopf

Address: 209 10th Ave South, Suite 414, Nashville, TN, 37203

Phone#: 615-296-9146 Fax#: 615-733-0052 E-mail: djmollen@themdglc.com

Surveyor: Cartesian Surveys Contact: Will Plotner

Address: PO Box 44414, Rio Rancho, NM 87124

Phone#: 505-896-3050 Fax#: 505-891-0244 E-mail: wplotnerjr@aol.com

Contractor: Schwob Building Company, LTD Contact: Micah Davenport

Address: 2349 Glenda Lane, Dallas, TX 75229

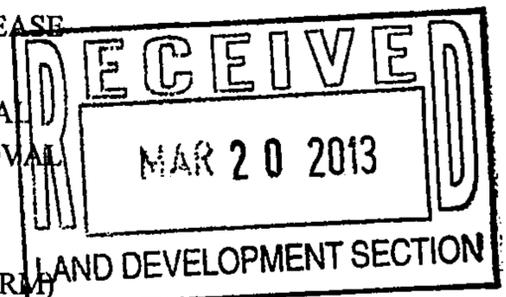
Phone#: 972-243-7674 Fax#: 972-243-7710 E-mail: mdavenport@schwob.com

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- DRAINAGE REPORT
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- ESC PERMIT APPROVAL
- ESC CERT. ACCEPTANCE
- OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED:  Yes  No  Copy Provided

DATE SUBMITTED: March 20, 2013 By: Jeffrey T. Wooten, P.E.

*FLOODPLAIN permit Required*

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
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gwr

# TIERRA WEST, LLC

March 20, 2013

Mr. Gregory R. Olson, P.E.  
Senior Engineer  
City of Albuquerque  
600 2<sup>nd</sup> NW  
Albuquerque, NM 87102

**RE: OLD DOMINION FREIGHT LINE, 330 AIRPORT ROAD NW  
RESPONSES FOR GRADING & DRAINAGE PLAN / DRAINAGE REPORT**

Dear Mr. Olson,

Per your correspondence dated March 15, 2013, regarding the Old Dominion Freight Line located at 330 Airport Road NW Grading Plan and Drainage Plan, please find the following responses addressing the comments listed below:

1. The report confuses Tracts B-1-A and B-1-B, and actually shows B-1-A as part of the site in the vicinity map. Please clarify.

**RESPONSE: The north line of the vicinity map in the report was corrected to reflect Tract B-1-B.** ✓

2. The proposed gravity drain line from the detention pond, through the off-site easement is not acceptable, without dedication of a "Private Storm Drain Easement." Jeff's verbal, alternate proposal is acceptable, to provide a pumped discharge from the pond to a surface discharge point at a drivepad or sidewalk culvert. Provide details of this design, including pump and line sizing, and SO-19 if appropriate.

**RESPONSE: We have modified the plan to allow the pond to discharge via a dual pump lift station (alternating pumps will cycle reducing wear and will allow at least one pump backup). The six inch force main will discharge to a concrete pad near the main entry drive which then flows to Airport Road. Since the discharge occurs on-site, an SO-19 is not anticipated.**

3.5A <sup>6/1/12</sup>  
Disch ✓

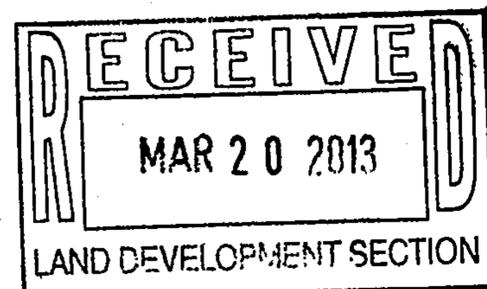
3. Show flow arrows and rates where off-site flows enter the site, and the proposed, pump discharge flows leave the site.

**RESPONSE: The flow arrows/rates of off-site discharge were labeled as well as the discharge from the pump/force main.** ✓

4. Label (or identify by legend) the surface treatments, pavements, landscape treatments, erosion control details in the perimeter swale, etc.

**RESPONSE: All areas shown within curbs are paved/impervious areas. The pond and swale are both lined with cobble per the landscape plan. Applicable notes and/or labels were added to the plan to better reflect treatments.**

5571 Midway Park Place NE Albuquerque, NM 87109  
(505) 858-3100 Fax (505) 858-1118 1-800-245-3102  
tierrawestllc.com



5. Label major site features, such as buildings, fueling islands, oil-water separator, etc. Show how the Oil-Water separator will drain.

**RESPONSE:** These items were labeled and a note added to the oil/water separator to reference the utility plan. For clarification, there is a curb along the north edge of the fuel island that directs storm water around the fuel island and there is a canopy over the fuel area which helps to keep storm water out of the sanitary sewer. ✓

6. Since the pond has no designated "Emergency Overflow," the pond volume should be designed to accommodate the 10 day storm volume. As discussed, surcharging that surplus volume into the paved parking area may also serve as an indicator to the owner, when pond maintenance is needed.

**RESPONSE:** The pond has been resized to contain the 10-day Storm Volume. The updated calculations in the report reflect the updated volumes. Furthermore, the pond volume data was added to the grading/drainage plan so that it can be verified upon submittal of the Drainage Certification for the Certificate of Occupancy.

7. The drainage plan shows 0.88 cfs being free discharged onto Airport Road along the NW edge of the site. This flow should at least be routed through depressed landscape area(s), harvest the first 0.44-inch of rain, and the resultant discharge rate must be included in the site limit of 0.1 cfs/acre. It may be appropriate to detain some of the off-site flows from the north in the landscape strip along the northern boundary, and even divert some of that flow to Airport Road.

**RESPONSE:** This discharge to Airport Road is 1.20 cfs. The 0.88 cfs you noted was reflective of pre-developed conditions. This 1.20 cfs was removed from the allowable discharge from the pond's force main so that the net discharge from the pond is +/- 0.68 cfs (305 GPM). The combined discharge from the pond and the discharge to Airport Road total 1.88 cfs, which is our maximum discharge per the Atrisco Business Park Master Drainage Plan (0.10 cfs/acre). We can modify the pond to retain the 0.44 inches per the proposed Grading Ordinance.

8. The First Flush Volume table in the report is miss-labeled as 0.43 cu. Ft. ✓

**RESPONSE:** The label was corrected to read acre-ft.

If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

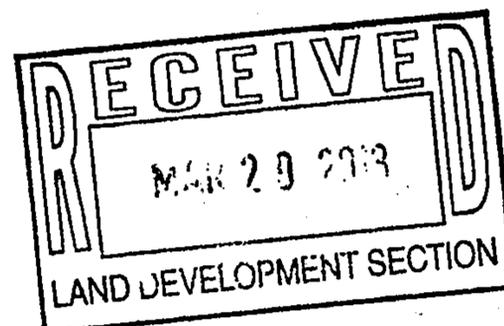
Sincerely,



Ronald R. Bohannon, P.E.

Enclosure/s

JN: 2013002  
RRB/JW/rmq



# DRAINAGE REPORT

For

**Old Dominion Freight Line Inc.**

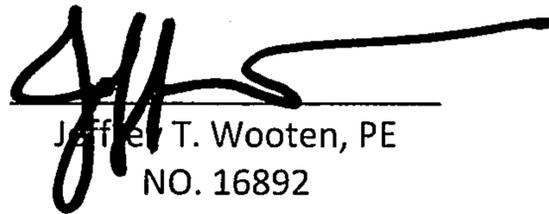
**330 Airport Drive N.W.  
Albuquerque, New Mexico**

Prepared by:

Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, New Mexico 87109

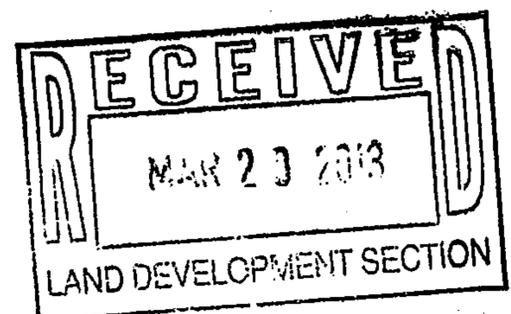
Revised March 20, 2013

I certify that this report was prepared under my supervision, and I am a registered Professional Engineer in the State of New Mexico in good standing.

  
Jeffrey T. Wooten, PE  
NO. 16892



Job No. 2013002



**TABLE OF CONTENTS**

Introduction .....1

Vicinity Map .....1

FIRMap .....2

Pre-Developed Condition .....2

Post-Developed Condition .....3

Conclusion .....4

Pre-Developed Basin Map .....5

Post-Developed Basin Map .....6

**Appendices**

Hydrologic and Hydraulic Analysis .....APPENDIX A

Lift Station Data and Pump Curve .....APPENDIX B

**Map Pockets**

Grading and Drainage Plan ..... Map Pocket

# DRAINAGE MANAGEMENT PLAN

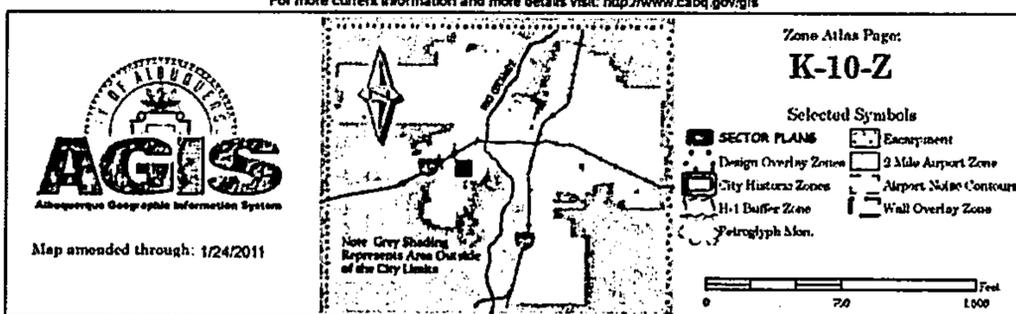
## Introduction

The purpose of this submittal is to provide a drainage management plan for approval of the Site Plan for Building Permit for Old Dominion Freight Line Inc., (Tract B-1-B, Atrisco Business Park, Unit 1). The site plan for the property reflects one new office/warehouse building and a private fuel station; along with associated parking, trailer storage areas, and landscaped areas. The site is located near the southeast corner of Airport Drive NW and Bluewater Road NW with a physical address of 330 Airport Drive NW. The site contains approximately 11.85 acres and lies within Precipitation Zone 1 according to Section 22.2 of the DPM.

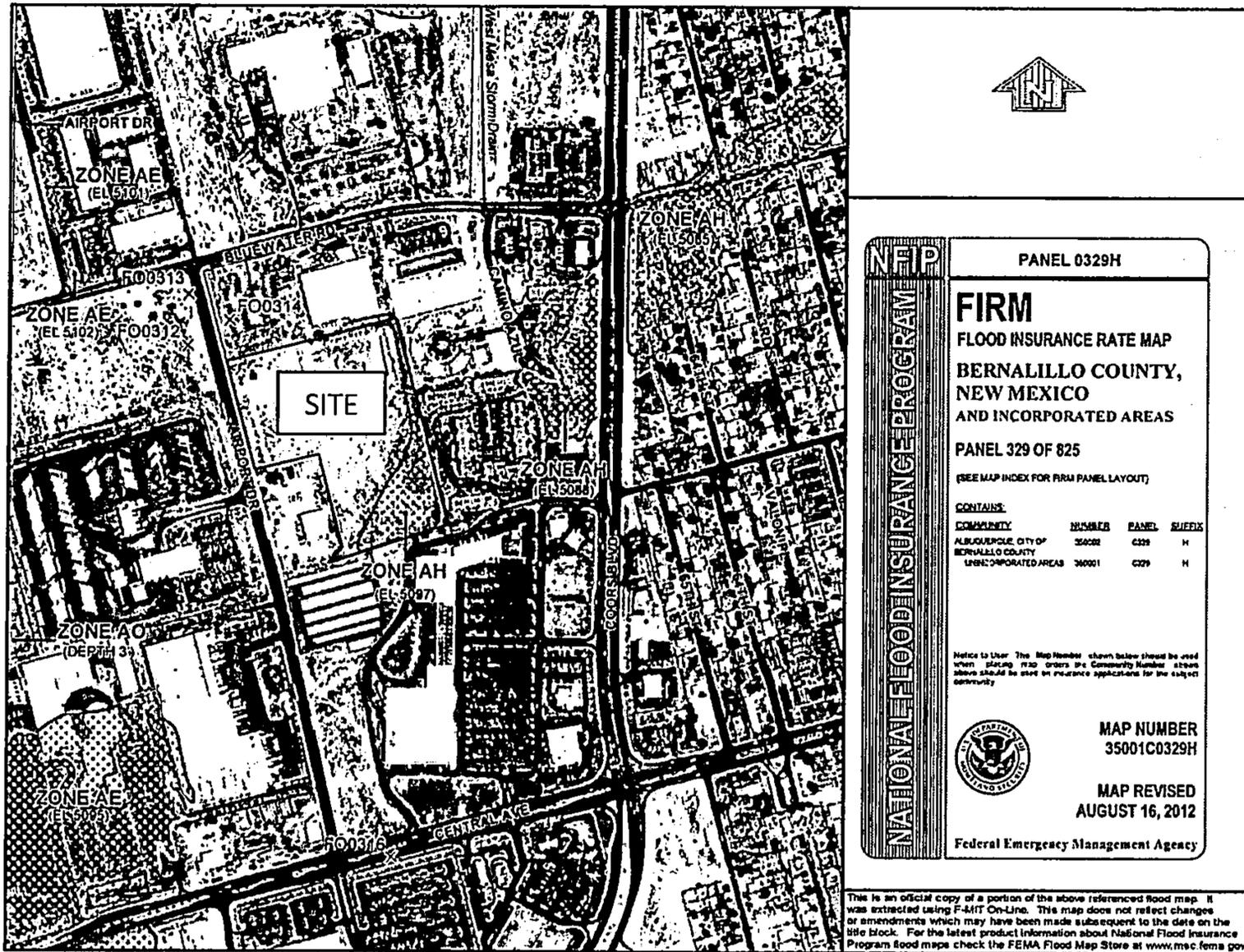
## Vicinity Map



For more current information and more details visit: <http://www.cabq.gov/gis>



FEMA FIRMap



**Pre-Developed Conditions**

The subject site is located southeast of the intersection of Bluewater Road and Airport Drive NW and is bound by developed land to the north, east, and south, and Airport Drive to the west. The site is currently undeveloped, but a portion of the 11.85 acre lot has been disturbed and therefore partially compacted. The existing topography generally slopes from north to south with vegetation covering less than 10 percent (approximately) of the total acreage. As shown on FEMA Flood Map 35001C0329H the southeast corner of the site has a flood zone designation of AH, due to the existing retention pond located onsite. The site is located in Precipitation Zone 1 according to Section 22.2 of the DPM.

As shown on the attached drainage basin map, existing conditions allow developed offsite flows to enter the subject site from the north (Tract B-1-A) and from the west (Tract B-2). The onsite runoff, as well as the offsite flows, are conveyed to the existing retention pond at the southeast corner of the site via sheet flow and shallow concentrated flow. A portion of the onsite runoff (Basin A) is conveyed to Airport Drive.

Under the pre-developed conditions, the overall tributary drainage basin produces a peak discharge of 51.96 cfs and 1.67 ac-ft of volumetric runoff for the 100-year, 6-hour storm.

### **Post-Developed Conditions**

The proposed development consists of a new 19,813 SF truck terminal and a 3,410 SF fuel canopy. The development also consists of parking lots, paved trailer storage areas, an onsite detention pond, utilities, perimeter security fencing, and landscaping.

The attached drainage basin map illustrates the overall drainage management plan based on the proposed development. The offsite runoff from the north (Tract B-1-A) will continue to be accepted and will enter a 15' by 2' v-ditch cobble swale, which will follow the north and east property boundaries to be conveyed to the pond at the south end of the site. Similarly, the partial offsite runoff from the west (Tract B-2) will continue to be accepted and conveyed to the onsite pond. Upon future redevelopment of Tract B-2, the site shall conform to the current approved drainage management plan for that tract and no longer discharge runoff onto the subject property. The onsite runoff will be handled via surface drainage as indicated below; Basin A-1 will continue to discharge runoff to Airport Drive (1.20 cfs), while Basins B-1, B-2, B-3, and B-4 will all contribute runoff to the onsite detention pond.

Per the approved Atrisco Business Park Master Drainage Plan dated October 1993, the subject site is allowed to discharge into the existing storm drain in Airport Drive at a rate of 0.10 cfs/acre. Since there is approximately 18.66 acres draining into the pond, the allowable discharge from this area is 1.87 cfs. The proposed onsite detention pond at the south end of the site was sized to accommodate the developed volumetric runoff and will contain a standpipe and 12" drain line which will connect to an onsite storm water lift station and force main. The lift station and force main has been designed to discharge a constant 305 gpm (0.67 cfs). The 6" PVC force main discharges onsite via an extended curb near the entry driveway on Airport Drive, and is conveyed in the gutter of Airport Drive to the existing storm inlets downstream to the south. The lift station pump discharge of 0.67 cfs combined with Basin A-1 discharge of 1.2 cfs equals the allowable discharge of 1.87 cfs to the storm drain in Airport Drive as previously stated.

The first flush volume (0.43 acre-ft) will be retained in the onsite pond to act as a permanent storm water quality BMP (i.e. between zero and 2 ft, the stand pipe accepts no flows; see pond stand pipe detail and first flush volume calculations for details). Further the pond is sized to detain the 6-Hour volume (2.69 ac-ft) and will drain via the lift station within 50 hours (neglecting percolation). Since the

pond will take longer than 24 hours to drain, it has been oversized to handle the 10-Day volume (5.38 acre-ft) in the event that a second 6-Hour storm should occur. The pond will have an overall depth of 9' with 3:1 side slopes and a maintenance entrance for cleaning as necessary.

Under the post-developed conditions, the overall tributary drainage basin contributes a peak discharge of 74.68 cfs (2.69 ac-ft of volumetric runoff) for the 100-year, 6-hour storm event, and will be reduced to 1.87 cfs by design of this grading and drainage management plan. For further grading and drainage details, please refer to the Grading and Drainage Plan.

### **Conclusion**

This Drainage Management Plan provides for grading and drainage elements which are capable of safely passing the 100-Yr, 6-Hr storm and which meet City requirements and the Atrisco Business Park Master Drainage Plan. Furthermore, the plan, as identified above, will reduce any impacts to the downstream system. With this submittal, we request Final Grading and Drainage plan approval for Building Permit for the subject project.

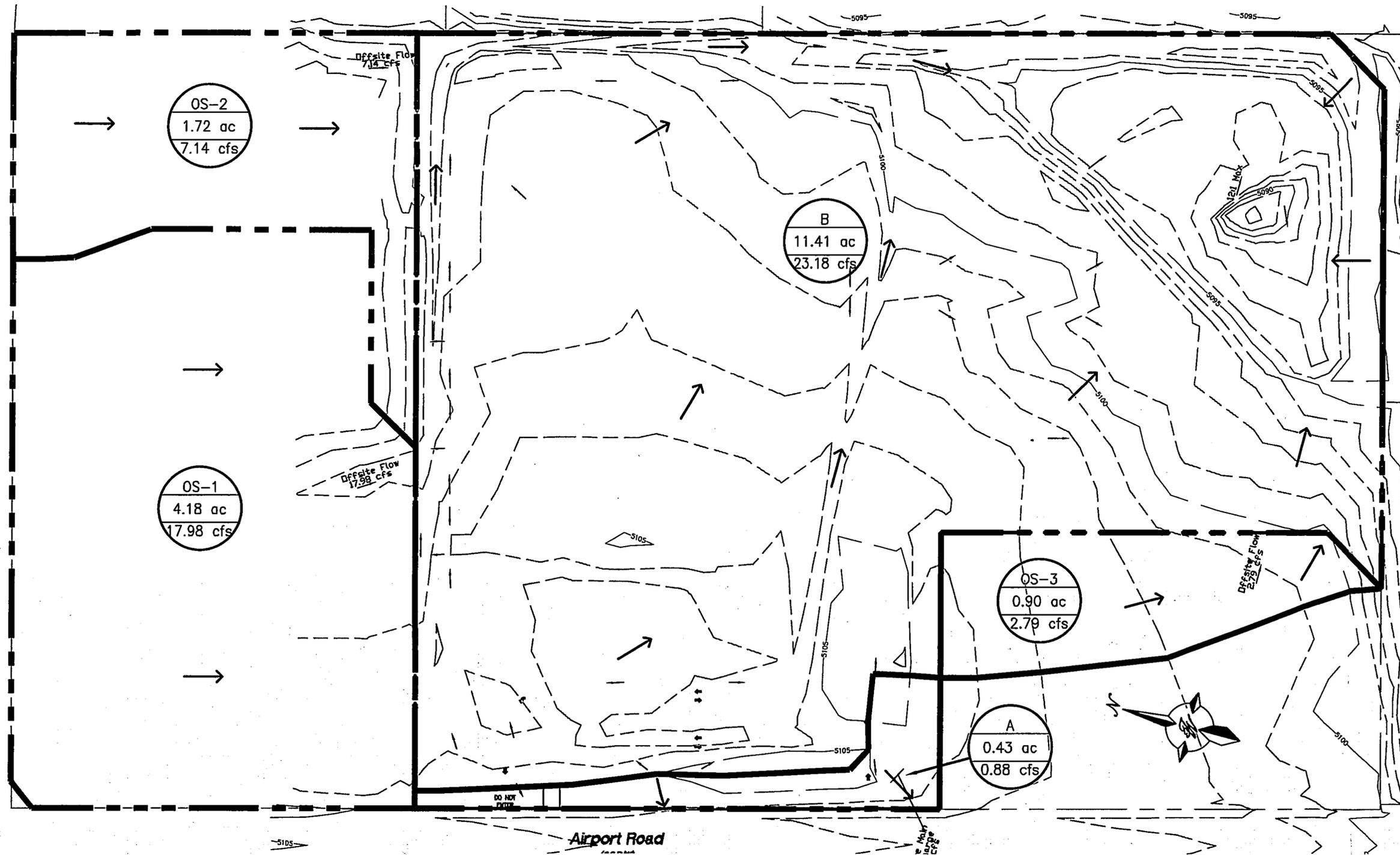
# PRE-DEVELOPED DRAINAGE BASINS

## Pre-Developed Basins

Basin	Basin Descriptions											100-Year, 6-Hr		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)			
OS-1	182,335	4.186	0.00654	0%	0	0%	0.000	5%	0.209	95%	3.977	1.921	0.670	17.98
OS-2	75,029	1.722	0.00269	0%	0	0%	0.000	15%	0.258	85%	1.464	1.823	0.262	7.14
OS-3	39,407	0.905	0.00141	0%	0	0%	0.000	86%	0.778	14%	0.127	1.127	0.085	2.79
A	18,842	0.433	0.00068	0%	0	100%	0.433	0%	0	0%	0.000	0.670	0.024	0.88
B	497,328	11.417	0.01784	0%	0	100%	11.417	0%	0	0%	0.000	0.670	0.637	23.18
<b>Total</b>	<b>812,940</b>	<b>18.663</b>	<b>0.02916</b>										<b>1.678</b>	<b>51.96</b>

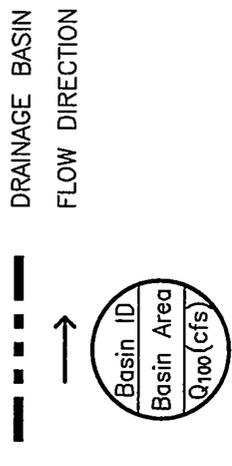
### LEGEND

----- DRAINAGE BASIN  
 → FLOW DIRECTION



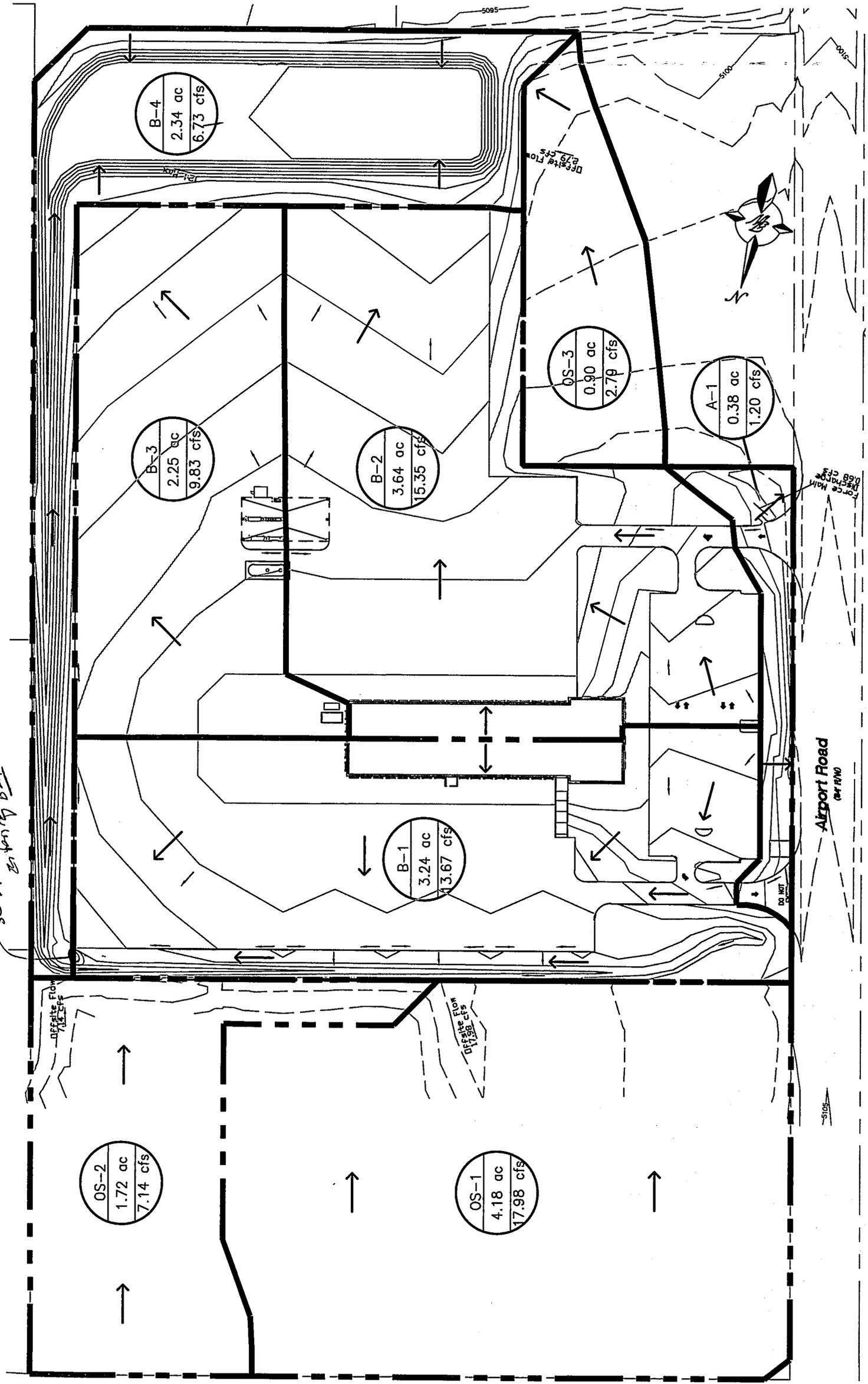
# POST-DEVELOPED DRAINAGE BASINS

## LEGEND



Basin ID	Area		Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%				
OS-1	182,335	4.186	0%	0	0%	0.000	5%	0.209	3.977	95%	1.921	0.670	17.98
OS-2	75,029	1.722	0%	0	0%	0.000	15%	0.258	1.464	85%	1.823	0.262	7.14
OS-3	39,407	0.905	0%	0	0%	0.000	86%	0.778	0.127	14%	1.127	0.085	2.79
A-1	16,552	0.380	0%	0	0%	0.000	80%	0.304	0.076	20%	1.186	0.038	1.20
B-1	141,122	3.240	0%	0	0%	0.000	10%	0.324	2.916	90%	1.872	0.505	13.67
B-2	158,400	3.636	0%	0	0%	0.000	10%	0.364	3.273	90%	1.872	0.567	15.35
B-3	97,997	2.250	0%	0	0%	0.000	0%	0	2.250	100%	1.970	0.369	9.83
B-4	102,116	2.344	0%	0	0%	0.000	100%	2.344	0.000	0%	0.990	0.193	6.73
<b>Total</b>	<b>812,958</b>	<b>18.663</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0.000</b>	<b>100%</b>	<b>4.582</b>	<b>14.081</b>	<b>0%</b>	<b>14.081</b>	<b>2.690</b>	<b>74.68</b>

38.99 cfs entering B-4



**APPENDIX A**

**HYDROLOGY AND HYDRAULIC CALCULATIONS**

**DPM Weighted E Method**

Precipitation Zone 1

Old Dominion Truck Terminal @ Airport Dr. and Bluewater Rd.

**Pre-Developed Basins**

Basin	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions								100-Year, 6-Hr			10-Year, 6-Hr			2-Year, 6-Hr		
				Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)									
OS-1	182,335	4.186	0.00654	0%	0	0%	0.000	5%	0.209	95%	3.977	1.921	0.670	17.98	1.200	0.419	11.80	0.690	0.241	6.82
OS-2	75,029	1.722	0.00269	0%	0	0%	0.000	15%	0.258	85%	1.464	1.823	0.262	7.14	1.120	0.161	4.62	0.630	0.090	2.60
OS-3	39,407	0.905	0.00141	0%	0	0%	0.000	86%	0.778	14%	0.127	1.127	0.085	2.79	0.552	0.042	1.53	0.204	0.015	0.58
A	18,842	0.433	0.00068	0%	0	100%	0.433	0%	0	0%	0.000	0.670	0.024	0.88	0.220	0.008	0.33	0.010	0.000	0.01
B	497,328	11.417	0.01784	0%	0	100%	11.417	0%	0	0%	0.000	0.670	0.637	23.18	0.220	0.209	8.68	0.010	0.010	0.34
<b>Total</b>	<b>812,940</b>	<b>18.663</b>	<b>0.02916</b>										<b>1.678</b>	<b>51.96</b>		<b>0.838</b>	<b>26.95</b>		<b>0.356</b>	<b>10.35</b>

Notes:

**Post-Developed Basins**

Basin	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions								100-Year, 6-Hr			10-Year, 6-Hr			2-Year, 6-Hr		
				Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)									
OS-1	182,335	4.186	0.00654	0%	0	0%	0.000	5%	0.209	95%	3.977	1.921	0.670	17.98	1.200	0.419	11.80	0.690	0.241	6.82
OS-2	75,029	1.722	0.00269	0%	0	0%	0.000	15%	0.258	85%	1.464	1.823	0.262	7.14	1.120	0.161	4.62	0.630	0.090	2.60
OS-3	39,407	0.905	0.00141	0%	0	0%	0.000	86%	0.778	14%	0.127	1.127	0.085	2.79	0.552	0.042	1.53	0.204	0.015	0.58
A-1	16,552	0.380	0.00059	0%	0	0%	0.000	80%	0.304	20%	0.076	1.186	0.038	1.20	0.600	0.019	0.67	0.240	0.008	0.27
B-1	141,122	3.240	0.00506	0%	0	0%	0.000	10%	0.324	90%	2.916	1.872	0.505	13.67	1.160	0.313	8.91	0.660	0.178	5.08
B-2	158,400	3.636	0.00568	0%	0	0%	0.000	10%	0.364	90%	3.273	1.872	0.567	15.35	1.160	0.352	10.00	0.660	0.200	5.70
B-3	97,997	2.250	0.00352	0%	0	0%	0.000	0%	0	100%	2.250	1.970	0.369	9.83	1.240	0.232	6.50	0.720	0.135	3.80
B-4	102,116	2.344	0.00366	0%	0	0%	0.000	100%	2.344	0%	0.000	0.990	0.193	6.73	0.440	0.086	3.49	0.120	0.023	1.10
<b>Total</b>	<b>812,958</b>	<b>18.663</b>	<b>0.02916</b>					<b>4.582</b>	<b>14.081</b>				<b>2.690</b>	<b>74.68</b>		<b>1.623</b>	<b>47.52</b>		<b>0.891</b>	<b>25.95</b>

Notes:

**Equations:**

Weighted E =  $E_a * A_a + E_b * A_b + E_c * A_c + E_d * A_d / (\text{Total Area})$

Volume = Weighted D \* Total Area

Flow =  $Q_a * A_a + Q_b * A_b + Q_c * A_c + Q_d * A_d$

Pond	100 yr, 6 hr	10 day
Required First Flush Volume	0.43	---
Required Total Volume	2.69	5.38
Provided Total Volume	6.04	6.04
WS Elevation	5093	5095.5

**First Flush Volumes for Onsite Basins**

Basin ID	Area (ac)	First Flush Volume (ac-ft)
A-1	0.38	0.01
B-1	3.24	0.12
B-2	3.64	0.13
B-3	2.25	0.08
B-4	2.34	0.09
<b>Total</b>	<b>11.85</b>	<b>0.43</b>

**Onsite Pond (South Property Line)**

**Stage-Storage-Discharge Table**

Elevation	Water Depth (ft)	Contour Area (sf)	Volume (cu-ft)	Volume (ac-ft)	Outlet Flow $Q_{max}$ (gpm)	Outlet Flow $Q_{max}$ (cfs)	Notes
5087.00	0	0	0	0	0	0	← Pond bottom
5088.00	1	11,813.1	5,906.55	0.1356	0	0	
5089.00	2	14,392.2	19,009.19	0.4364	305	0.680	← First flush volume
5090.00	3	17,984.4	35,197.50	0.8080	305	0.680	
5091.00	4	22,864.1	55,621.78	1.2769	305	0.680	
5092.00	5	35,502.2	84,804.93	1.9469	305	0.680	
5093.00	6	39,092.2	122,102.12	2.8031	305	0.680	
5094.00	7	43,876.2	163,586.34	3.7554	305	0.680	
5095.00	8	49,513.6	210,281.24	4.8274	305	0.680	
5095.25	8.25	50,997.8	222,845.16	5.1158	305	0.680	
5095.50	8.5	52,512.0	235,783.89	5.4129	305	0.680	← 10 day volume
5095.75	8.75	54,056.1	249,104.90	5.7187	305	0.680	
5096.00	9	56,282.1	263,179.09	6.0418	305	0.680	← Top of pond

**Discharge**

Constant discharge from storm water lift station - Pump requirements: 305 gpm and 22 ft of static head.

**APPENDIX B**

**LIFT STATION DATA AND PUMP CURVE**



**James,  
Cooke, &  
Hobson, Inc.**

**Sales Engineers**

---

**To: Jeff Wooten/ Paul Evans  
Tierra West**

**From: Bill Curb  
JCH/ James, Cooke, and Hobson, Inc.**

**Re: Old Dominion Storm Water Lift Station  
Albuquerque NM  
Preliminary Lift Station Design and Notes  
Flygt Pumping Equipment and Lift Station Accessories  
JCH Budget Quote 056-ABQ-FLYGT-13  
Rev 1**

**Date: March 14, 2013**

---

Jeff/ Paul,

**Provided data:**

Pumped media = storm water (pre-screened to remove large detritus)  
Design Flow = 305 gpm  
Static = 21ft

**Power Available**

We have assumed 460 Volt 3 phase power is available

**Force Main Design**

Force Main Diameter = 6" (assuming SCH 40 PVC force main)

**Total Dynamic Head Calculations**

305 gpm flow total flow  
Static Head = 21 ft

**Discharge force main = 6" PVC**

Assumed C = 135 for fairly dirty pipe  
Force Main Length = 570 ft

I assumed 20ft of lift station piping (4" Ductile iron) - fittings to include pump discharge connection, 1x 90° elbow out of wet well, ball check valve, isolation plug valve, and T where the 2x pump discharges come together.

Friction loss (Hazen Williams), including fittings in the pump station and valve vault = 7 ft at Q = 305 gpm  
TDH = 28 ft

Preliminary pump selection = Flygt Model NP3102 with 464 impeller, 5 hp motor.

**Wet Well / Valve Vault Information:**

Based on Flygt Model NP3102, Flygt will recommend install in a 6ft diameter wet well (reference attached lift station plan view dimensional drawings).

Check valves (2x), isolation service plug valves (2x), and Tee or Wye we recommend be located in adjacent valve vault (ref attached "typical" layout drawing).

Ref attached a drawings from recent fiberglass prefab wet well with adjacent valve vault, wet well can include the discussed TOPS basin insert. Please note when we supply the prefabricated wet well, we would use 304SS discharge piping rather than DI.

I am compiling pricing for both pump size options, will follow on completion. To provide budget pricing for the fiberglass wet well, we will need to know an estimated wet well depth.

Please call me at 505.344.7100 with any questions.

Thank you

Bill Curb  
JCH, Inc.



**NP 3102 MT 3~ Adaptive 464**  
Performance curve

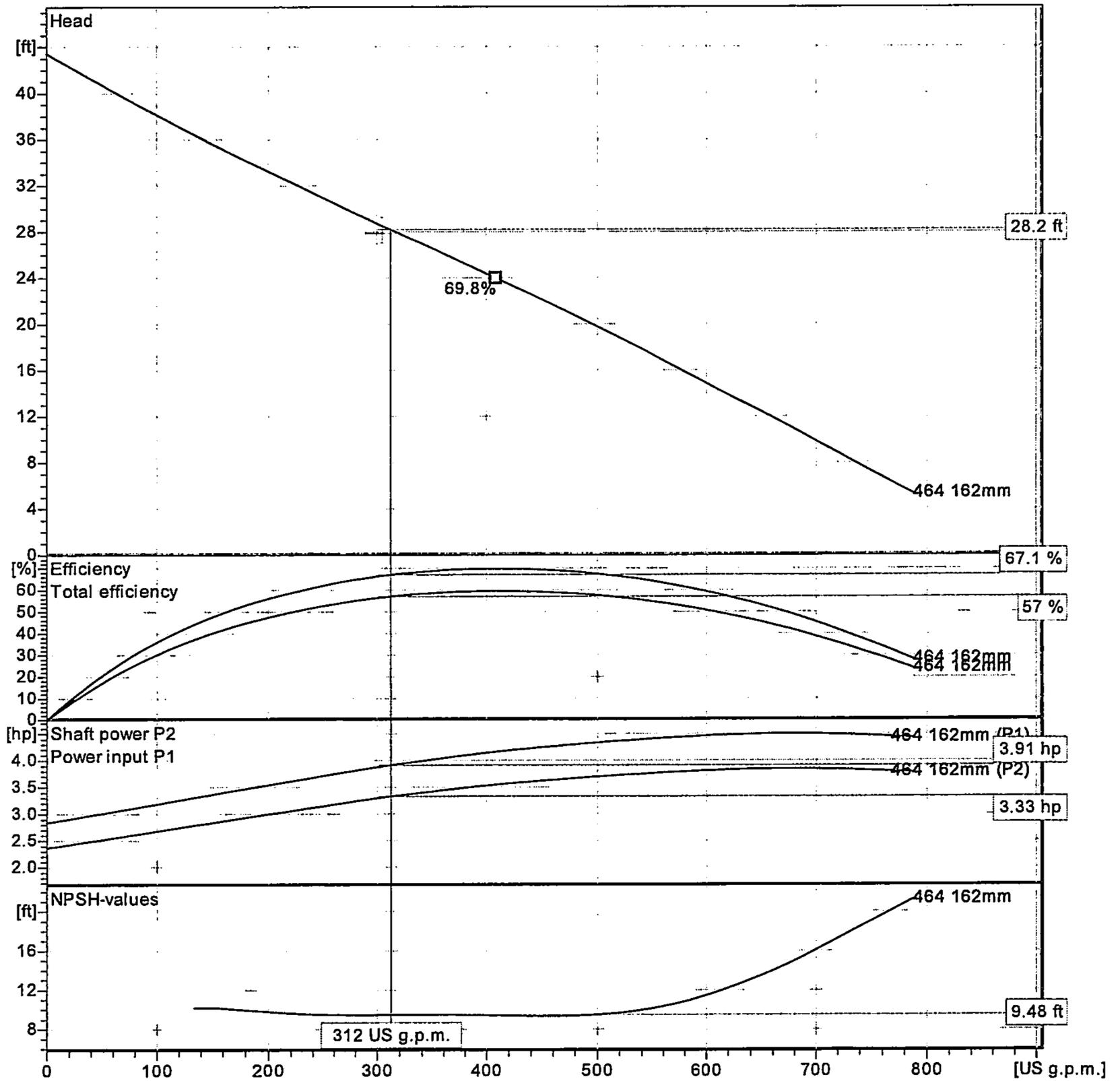
**Pump**

Outlet width 3 15/16 inch  
Inlet diameter 100 mm  
Impeller diameter 6 3/8"  
Number of blades 2  
0 inch

**Motor**

Motor # N3102.160 18-11-4AL-W5hp  
Stator variant 1  
Frequency 60 Hz  
Rated voltage 460 V  
Number of poles 4  
Phases 3~  
Rated power 5 hp  
Rated current 6.8 A  
Starting current 42 A  
Rated speed 1745 rpm

Power factor  
1/1 Load 0.81  
3/4 Load 0.75  
1/2 Load 0.63  
Efficiency  
1/1 Load 85.0 %  
3/4 Load 85.0 %  
1/2 Load 83.5 %



Curve according to: ISO 9906 grade 2 annex 1 or 2

Duty point		Shaft power	NPSH <sub>re</sub>	Hyd. eff. %	Guarantee HI_Class_B No
Flow	Head				
305 US g.p.m.	27.8 ft				

# CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development & Building Services



March 27, 2013

Richard J. Berry, Mayor

Ronald Ray Bohannon, P.E.  
Attn: Jeff Wooten, P.E.  
Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, New Mexico 87109

RE: **Old Dominion Freight Line - 330 Airport Road NW  
Grading & Drainage Plan and Drainage Report**

File **K10-D008A**  
PE Stamp: 3/27/13

Dear Mr. Bohannon,

Based upon the information provided in your submittal received 3/27/13, the above referenced plan is approved for Grading Permit and Building Permit.

Attached for your use is a copy of the **Floodplain Development Permit**.

PO Box 1293

Please attach a copy of the Floodplain Permit and this approved Grading and Drainage Plan to each of the Building Permit sets, prior to approval by Hydrology section.

Albuquerque

Prior to Certificate of Occupancy release, an Engineer Certification of the as-constructed, Grading and Drainage Plan, including the Detention Pond elevations and volume, will be required, per the DPM checklist.

NM 87103

If you have any questions, please contact me at [grolson@cabq.gov](mailto:grolson@cabq.gov), or phone 505-924-3695.

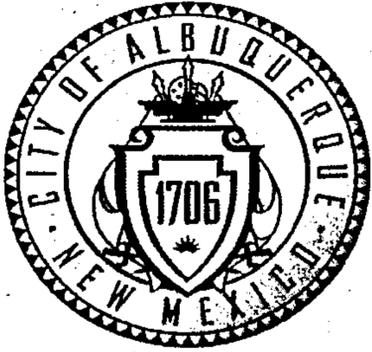
[www.cabq.gov](http://www.cabq.gov)

Sincerely,



Gregory R. Olson, P.E.  
Senior Engineer

Orig: Drainage file K10-D008A  
c.pdf Addressee via Email: [RRB@TierraWestLLC.com](mailto:RRB@TierraWestLLC.com) & [JWooten@TierraWestLLC.com](mailto:JWooten@TierraWestLLC.com)



# City of Albuquerque

Planning Department

Development & Building Services Division

## RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Old Dominion Freight Line, Inc. City Drainage #: 110 DWSA

DRB#: 13DRB-70458 EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: Tract B-1-B, Atrisco Business Park, Unit 1

City Address: 330 Airport Rd NW

Engineering Firm: Tierra West, LLC Contact: Jeffrey T. Wooten, P.E.

Address: 5571 Midway Park Place NE, Albuquerque, NM 87109

Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: jwooten@tierrawestllc.com

Owner: Old Dominion Freight Line, Inc. Contact: Jerry Canada

Address: 500 Old Dominion Way, Thomasville, NC 27360

Phone#: 317-494-1278 Fax#: \_\_\_\_\_ E-mail: jerry.canada@odfl.com

Architect: David Mollenkopf Architect Contact: David Mollenkopf

Address: 209 10th Ave South, Suite 414, Nashville, TN, 37203

Phone#: 615-296-9146 Fax#: 615-733-0052 E-mail: djmollen@themdglc.com

Surveyor: Cartesian Surveys Contact: Will Plotner

Address: PO Box 44414, Rio Rancho, NM 87124

Phone#: 505-896-3050 Fax#: 505-891-0244 E-mail: wplotnerjr@aol.com

Contractor: Schwob Building Company, LTD Contact: Micah Davenport

Address: 2349 Glenda Lane, Dallas, TX 75229

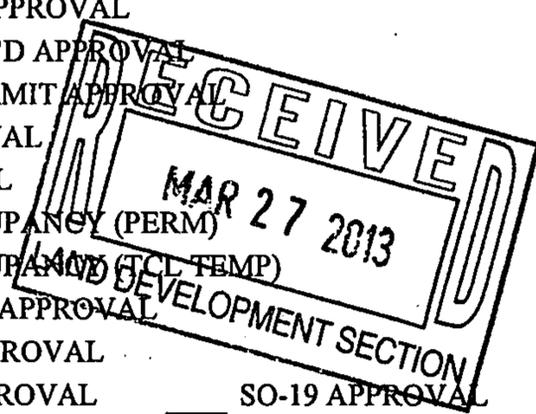
Phone#: 972-243-7674 Fax#: 972-243-7710 E-mail: mdavenport@schwob.com

### TYPE OF SUBMITTAL:

- DRAINAGE REPORT
- DRAINAGE PLAN 1st SUBMITTAL
- DRAINAGE PLAN RESUBMITTAL
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- EROSION & SEDIMENT CONTROL PLAN (ESC)
- ENGINEER'S CERT (HYDROLOGY)
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- ENGINEER'S CERT (TCL)
- ENGINEER'S CERT (DRB SITE PLAN)
- ENGINEER'S CERT (ESC)
- SO-19
- OTHER (SPECIFY)

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- SIA/FINANCIAL GUARANTEE RELEASE
- PRELIMINARY PLAT APPROVAL
- S. DEV. PLAN FOR SUB'D APPROVAL
- S. DEV. FOR BLDG. PERMIT APPROVAL
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- CERTIFICATE OF OCCUPANCY (TCL TEMP)
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- GRADING CERTIFICATION
- SO-19 APPROVAL
- ESC PERMIT APPROVAL
- ESC CERT. ACCEPTANCE
- OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED: \_\_\_\_\_ Yes  No \_\_\_\_\_ Copy Provided

DATE SUBMITTED: March 27, 2013 By: Jeffrey T. Wooten, P.E.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development



gaw

# TIERRA WEST, LLC

March 27, 2013

Mr. Gregory R. Olson, P.E.  
Senior Engineer  
City of Albuquerque  
600 2<sup>nd</sup> NW  
Albuquerque, NM 87102

**RE: FILE K10-D008A  
OLD DOMINION FREIGHT LINE, 330 AIRPORT ROAD NW  
GRADING & DRAINAGE PLAN and DRAINAGE REPORT**

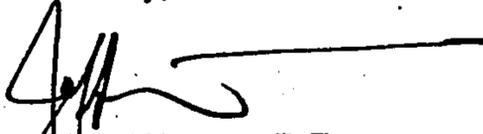
Dear Mr. Olson,

Per your correspondence dated March 26, 2013, regarding the Old Dominion Freight Line located at 330 Airport Road NW Grading Plan & Drainage Plan and Drainage Report please find the following responses addressing the comments listed below:

1. Show the limits of the existing Special Flood Hazard Area (BFE = 5097) on the plan.  
**RESPONSE: The flood plain and BFE were added to the plan.**
2. Include the stormwater pump model, size, and discharge rate on the plan, and thus include the As-Built pump information on the future, drainage Certification plan.  
**RESPONSE: The pump data was added to the plan.**
3. On sheet C5, the outlet structure inverts differ from those shown on the Grading Plan. Also, it does not show the 2" diameter, low flow ports that were shown on the previous submittal. Is the pond intended to retain two feet of water?  
**RESPONSE: The outlet elevation was modified to reflect the new pond elevation.**
4. The plan and report do not include any channel section or capacity calculations for the North and East perimeter channels. The landscape plan shows numerous trees along the perimeter channel. Confirm that channel capacity is adequate for design flows.  
**RESPONSE: The cross section was added to the plan as well as calculations for the capacity. The swale has 1' of freeboard at the shallowest section.**
5. Please include pond lining and channel mulch specs on the G&D, rather than just referring to the landscape plan. If landscaping requirements change, they must be reviewed and changed in the G&D.  
**RESPONSE: The swale and pond treatments were added to the plan.**

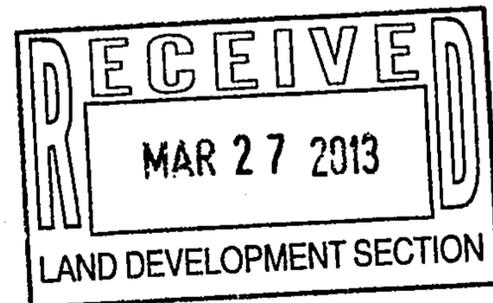
If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

Sincerely,

  
Jeffrey Wooten, P.E.

Enclosure/s

JN: 2013002  
JW/djb/rmq



5571 Midway Park Place NE Albuquerque, NM 87109  
(505) 858-3100 Fax (505) 858-1118 1-800-245-3102  
tierrawestllc.com

# CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development & Building Services



March 15 2013

Richard J. Berry, Mayor

Ronald Ray Bohannon, P.E.  
Attn: Jeff Wooten, P.E.  
Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, New Mexico 87109

RE: **Old Dominion Freight Line - 330 Airport Road NW  
Grading & Drainage Plan and Drainage Report**

File **K10-D008A**  
PE Stamp: 2/27/13

Dear Mr. Bohannon,

Based upon the information provided in your submittal received 2/27/2013, the above referenced plan is ONLY approved for Site Plan for Building Permit action by the DRB. This plan cannot be approved for Grading Permit or Building Permit until the following issues are addressed:

*Verbal Follow up on 3/18  
This Plan is NOT OK  
So DRB since it does not  
show Pumped  
Disch.  
Replacement  
plan to be  
submitted  
ASAP per  
Jeff W.  
MLD  
3/18*

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

1. The report confuses Tracts B-1-A and B-1-B, and actually shows B-1-A as part of the site in the vicinity map. Please clarify.
2. The proposed gravity drain line from the detention pond, through the off-site easement is not acceptable, without dedication of a "Private Storm Drain Easement." Jeff's verbal, alternate proposal is acceptable, to provide a pumped discharge from the pond to a surface discharge point at a drivepad or sidewalk culvert. Provide details of this design, including pump and line sizing, and SO-19 if appropriate.
3. Show flow arrows and rates where off-site flows enter the site, and the proposed, pump discharge flows leave the site.
4. Label (or identify by legend) the surface treatments, pavements, landscape treatments, erosion control details in the perimeter swale, etc.
5. Label major site features, such as buildings, fueling islands, oil-water separator, etc. Show how the Oil-Water separator will drain.
6. Since the pond has no designated "Emergency Overflow," the pond volume should be designed to accommodate the 10 day storm volume. As discussed, surcharging that surplus volume into the paved parking area may also serve as an indicator to the owner, when pond maintenance is needed.

*AO*

**K10-D008A**

Old Dominion Freight Line

March 15, 2013

Page 2

7. The drainage plan shows 0.88 cfs being free discharged onto Airport Road along the NW edge of the site. This flow should at least be routed through depressed landscape area(s), harvest the first 0.44-inch of rain, and the resultant discharge rate must be included in the site limit of 0.1 cfs/acre. It may be appropriate to detain some of the off-site flows from the north in the landscape strip along the northern boundary, and even divert some of that flow to Airport Road.
8. The First Flush Volume table in the report is miss-labeled as 0.43 cu. Ft.

If you have any questions, you may contact me by email at [grolson@cabq.gov](mailto:grolson@cabq.gov), or telephone 505-924-3695.

Sincerely,

 3/15/13

Gregory R. Olson, P.E.  
Senior Engineer

Orig: Drainage file K10-D008A  
c.pdf Addressee via Email: [RRB@TierraWestLLC.com](mailto:RRB@TierraWestLLC.com) & [JWooten@TierraWestLLC.com](mailto:JWooten@TierraWestLLC.com)



# City of Albuquerque

Planning Department

Development & Building Services Division

## RAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Old Dominion Freight Line, Inc. City Drainage #: K-10/2008A  
 DRB#: 13DRB-70458 EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
 Legal Description: Tract B-1-B, Atrisco Business Park, Unit 1  
 City Address: 330 Airport Rd NW

Engineering Firm: Tierra West, LLC Contact: Jeffrey T. Wooten, P.E.  
 Address: 5571 Midway Park Place NE, Albuquerque, NM 87109  
 Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: jwooten@tierrawestllc.com

Owner: Old Dominion Freight Line, Inc. Contact: Jerry Canada  
 Address: 500 Old Dominion Way, Thomasville, NC 27360  
 Phone#: 317-494-1278 Fax#: \_\_\_\_\_ E-mail: jerry.canada@odfl.com

Architect: David Mollenkopf Architect Contact: David Mollenkopf  
 Address: 209 10th Ave South, Suite 414, Nashville, TN, 37203  
 Phone#: 615-296-9146 Fax#: 615-733-0052 E-mail: djmollen@themdglc.com

Surveyor: Cartesian Surveys Contact: Will Plotner  
 Address: PO Box 44414, Rio Rancho, NM 87124  
 Phone#: 505-896-3050 Fax#: 505-891-0244 E-mail: wplotnerjr@aol.com

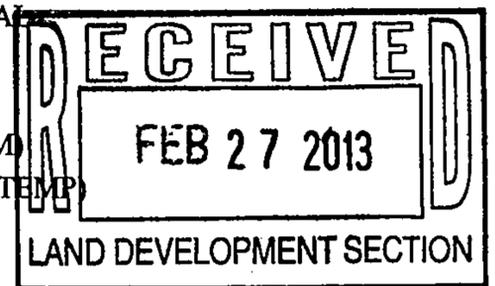
Contractor: Schwob Building Company, LTD Contact: Micah Davenport  
 Address: 2349 Glenda Lane, Dallas, TX 75229  
 Phone#: 972-243-7674 Fax#: 972-243-7710 E-mail: mdavenport@schwob.com

### TYPE OF SUBMITTAL:

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- OTHER (SPECIFY)

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- PAVING PERMIT APPROVAL
- WORK ORDER APPROVAL
- GRADING CERTIFICATION
- SO-19 APPROVAL
- ESC PERMIT APPROVAL
- ESC CERT. ACCEPTANCE
- OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED: Yes  No  Copy Provided

DATE SUBMITTED: February 27, 2013 By: Jeffrey T. Wooten, P.E.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
- Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
- Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
- Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

*Handwritten notes:*  
 2/27/13  
 \$500  
 \$50  
 JTW

# DRAINAGE REPORT

For

**Old Dominion Freight Line Inc.**

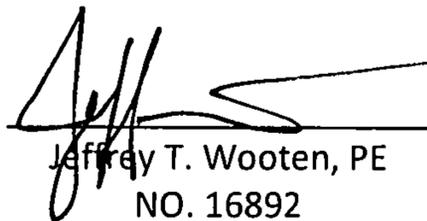
**330 Airport Drive N.W.  
Albuquerque, New Mexico**

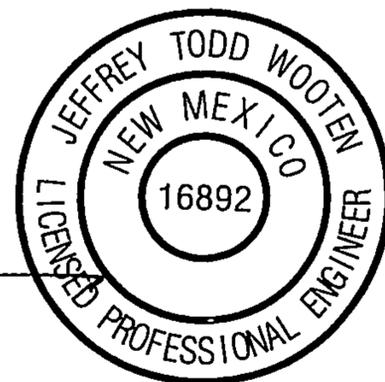
Prepared by:

Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, New Mexico 87109

February 27, 2013

I certify that this report was prepared under my supervision, and I am a registered Professional Engineer in the State of New Mexico in good standing.

  
Jeffrey T. Wooten, PE  
NO. 16892



Job No. 2013002

**TABLE OF CONTENTS**

Introduction .....1

Vicinity Map .....1

FIRMap .....2

Pre-Developed Condition .....2

Post-Developed Condition .....3

Conclusion .....4

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Post-Developed Basin Map .....6

**Appendices**

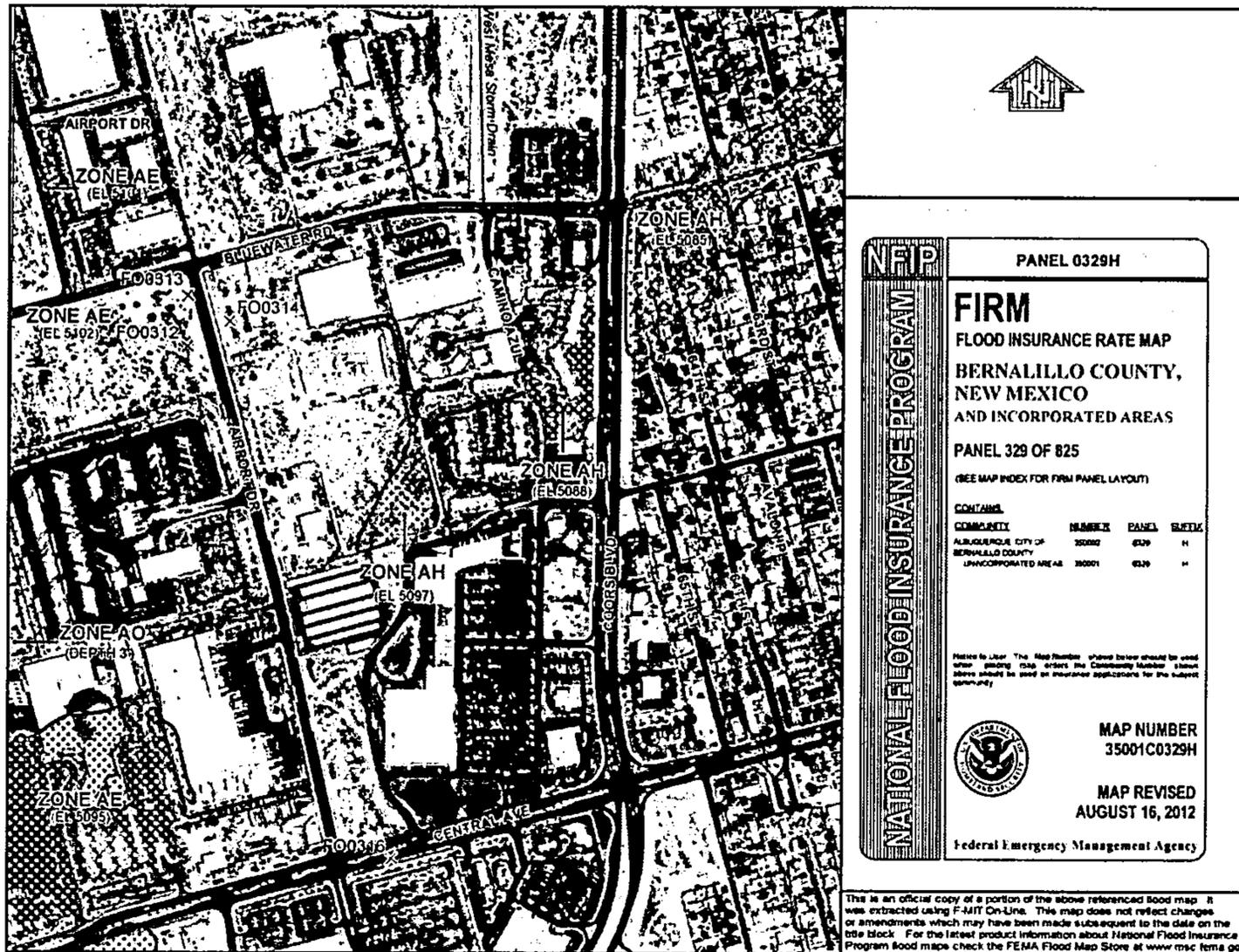
Hydrologic and Hydraulic Analysis .....APPENDIX A

**Map Pockets**

Grading and Drainage Plan ..... Map Pocket



## FEMA FIRMap



### Pre-Developed Conditions

The subject site is located southeast of the intersection of Bluewater Road and Airport Drive NW and is bound by developed land to the north, east, and south, and Airport Drive to the west. The site is currently undeveloped, but a portion of the 11.85 acre lot has been disturbed and therefore partially compacted. The existing topography generally slopes from north to south with vegetation covering less than 10 percent (approximately) of the total acreage. As shown on FEMA Flood Map 35001C0329H the southeast corner of the site has a flood zone designation of AH, due to the existing retention pond located onsite. The site is located in Precipitation Zone 1 according to Section 22.2 of the DPM.

As shown on the attached drainage basin map, existing conditions allow developed, offsite flows to enter the subject site from the north (Tract B-1-A) and from the west (Tract B-2). The onsite runoff, as well as the offsite flows, are conveyed to the existing retention pond at the southeast corner of the site via sheet flow and shallow concentrated flow. A portion of the onsite runoff (Basin A) is conveyed to Airport Drive.

Under the pre-developed conditions, the overall tributary drainage basin produces a peak discharge of 51.96 cfs and 1.67 ac-ft of volumetric runoff for the 100-year, 6-hour storm.

\*\*\*

### **Post-Developed Conditions**

The proposed development consists of a new 19,813 SF truck terminal and a 3,410 SF fuel canopy. The development also consists of parking lots, paved trailer storage areas, an onsite detention pond, utilities, perimeter security fencing, and landscaping.

The attached drainage basin map illustrates the overall drainage management plan based on the proposed development. The offsite runoff from the north (Tract B-1-A) will continue to be accepted and will enter a 15' by 2' v-ditch earthen swale, which will follow the north and east property boundaries to be conveyed to the pond at the south end of the site. Similarly, the partial offsite runoff from the west (Tract B-2) will continue to be accepted and conveyed to the onsite pond. Upon future redevelopment of Tract B-3, the site shall conform to the current approved drainage management plan for that tract and no longer discharge runoff onto the subject property. The onsite runoff will be handled via surface drainage as indicated below; Basin A-1 will continue to discharge runoff to Airport Dr., while B-1, B-2, B-3, and B-4 will all contribute runoff to the onsite detention pond.

Per the approved Atrisco Business Park Master Drainage Plan dated October 1993, our site is allowed to discharge into the existing storm drain in Airport Drive at a rate of 0.10 cfs/acre. Since there is approximately 18.66 acres draining into the pond, the allowable discharge from the pond is 1.87 cfs. The proposed onsite detention pond at the south end of the site was sized to accommodate the developed volumetric runoff and will contain a standpipe and 12" drain line which will connect to the existing storm drain line in Airport Drive via an existing 30' wide public drainage easement as shown on the Grading and Drainage Plan. A 5.5" orifice plate will be installed on the end of 12" RCP within the stand pipe to reduce the maximum discharge to 1.6 cfs. The pond will have an overall depth of 6' with 3:1 side slopes and is designed to capture the first flush volume of 0.43 ac-ft and act as a permanent storm water quality BMP by offering overall sedimentation control. The attached Stage-Storage-Discharge table illustrates the pond capacity and associated discharge.

Under the post-developed conditions, the overall tributary drainage basin contributes a peak discharge of 74.68 cfs (2.69 ac-ft of volumetric runoff) for the 100-year, 6-hour storm event, which will be reduced to 1.6 cfs by the outlet in the pond. For further grading and drainage details, please refer to the Grading and Drainage Plan.

**Conclusion**

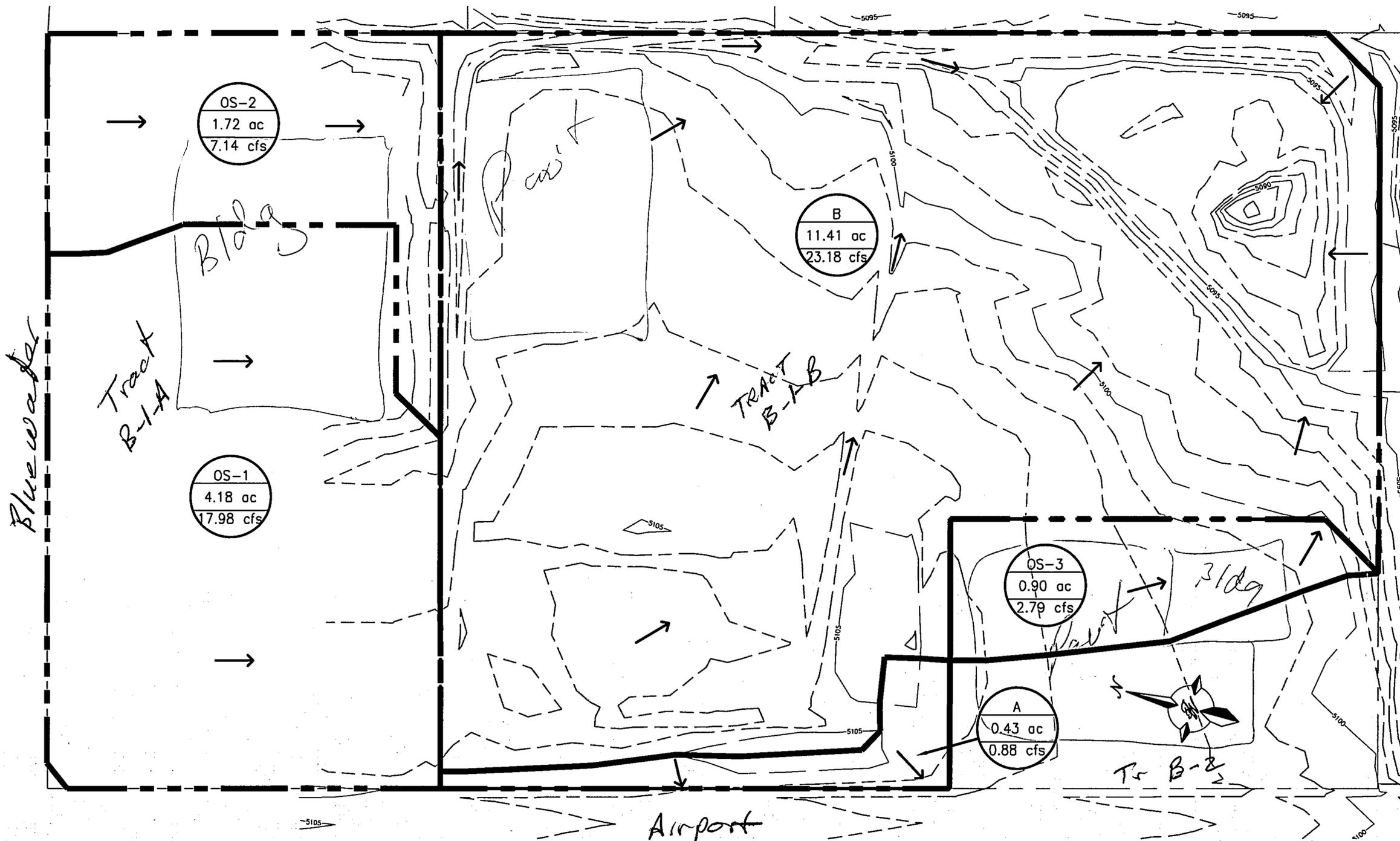
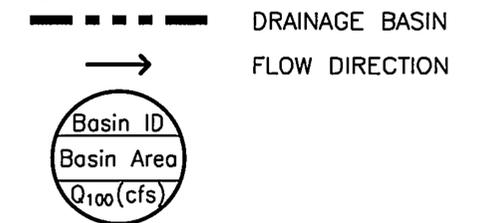
This Drainage Management Plan provides for grading and drainage elements which are capable of safely passing the 100-Yr, 6-Hr storm and which meet City requirements and the Atrisco Business Park Master Drainage Plan. Furthermore, the plan, as identified above, will reduce any impacts to the downstream system. With this submittal, we request Final Grading and Drainage plan approval for the Site Plan for Building Permit for the subject project.

# PRE-DEVELOPED DRAINAGE BASINS

## Pre-Developed Basins

Basin	Basin Descriptions											100-Year, 6-Hr		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)			
OS-1	182,335	4.186	0.00654	0%	0	0%	0.000	5%	0.209	95%	3.977	1.921	0.670	17.98
OS-2	75,029	1.722	0.00269	0%	0	0%	0.000	15%	0.258	85%	1.464	1.823	0.262	7.14
OS-3	39,407	0.905	0.00141	0%	0	0%	0.000	86%	0.778	14%	0.127	1.127	0.085	2.79
A	18,842	0.433	0.00068	0%	0	100%	0.433	0%	0	0%	0.000	0.670	0.024	0.88
B	497,328	11.417	0.01784	0%	0	100%	11.417	0%	0	0%	0.000	0.670	0.637	23.18
<b>Total</b>	<b>812,940</b>	<b>18.663</b>	<b>0.02916</b>										<b>1.678</b>	<b>51.96</b>

### LEGEND



### Pre-Developed Conditions

The subject site is located southeast of the intersection of Bluewater Road and Airport Drive NW and is bound by developed land to the north, east, and south, and Airport Drive to the west. The site is currently undeveloped, but a portion of the 11.85 acre lot has been disturbed and therefore partially compacted. The existing topography generally slopes from north to south with vegetation covering less than 10 percent (approximately) of the total acreage. As shown on FEMA Flood Map 35001C0329H the southeast corner of the site has a flood zone designation of AH, due to the existing retention pond located onsite. The site is located in Precipitation Zone 1 according to Section 22.2 of the DPM.

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Under the pre-developed conditions, the overall tributary drainage basin produces a peak discharge of 51.96 cfs and 1.67 ac-ft of volumetric runoff for the 100-year, 6-hour storm.

Post-Developed Basins

Basin	Basin Descriptions											100-Year, 6-Hr		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)			
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OS-3	39,407	0.905	0.00141	0%	0	0%	0.000	86%	0.778	14%	0.127	1.127	0.085	2.79
A-1	16,552	0.380	0.00059	0%	0	0%	0.000	80%	0.304	20%	0.076	1.186	0.038	1.20
B-1	141,122	3.240	0.00506	0%	0	0%	0.000	10%	0.324	90%	2.916	1.872	0.505	13.67
B-2	158,400	3.636	0.00568	0%	0	0%	0.000	10%	0.364	90%	3.273	1.872	0.567	15.35
B-3	97,997	2.250	0.00352	0%	0	0%	0.000	0%	0	100%	2.250	1.970	0.369	9.83
B-4	102,116	2.344	0.00366	0%	0	0%	0.000	100%	2.344	0%	0.000	0.990	0.193	6.73
<b>Total</b>	<b>812,958</b>	<b>18.663</b>	<b>0.02916</b>						<b>4.582</b>		<b>14.081</b>		<b>2.690</b>	<b>74.68</b>

Equations:

Weighted E =  $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d / (\text{Total Area})$

Volume = Weighted E \* Total Area

Flow =  $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

# POST-DEVELOPED DRAINAGE BASINS

LEGEND

--- DRAINAGE BASIN

→ FLOW DIRECTION



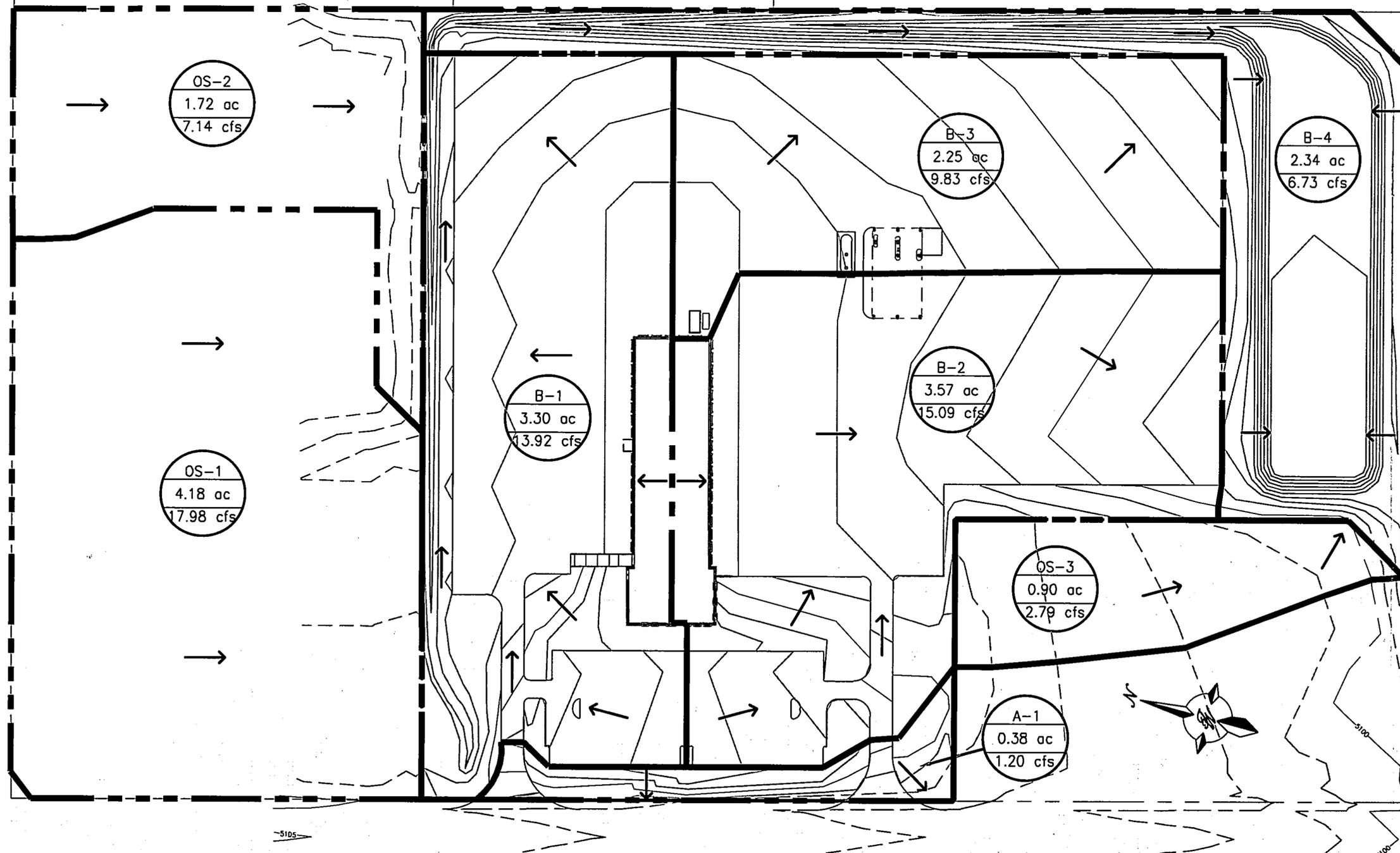
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APPENDIX A

HYDROLOGY AND HYDRAULIC CALCULATION

**DPM Weighted E Method**

Precipitation Zone 1

Old Dominion Truck Terminal @ Airport Dr. and Bluewater Rd.

**Pre-Developed Basins**

Basin	Basin Descriptions											100-Year, 6-Hr			10-Year, 6-Hr			2-Year, 6-Hr		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)									
OS-1	182,335	4.186	0.00654	0%	0	0%	0.000	5%	0.209	95%	3.977	1.921	0.670	17.98	1.200	0.419	11.80	0.690	0.241	6.82
OS-2	75,029	1.722	0.00269	0%	0	0%	0.000	15%	0.258	85%	1.464	1.823	0.262	7.14	1.120	0.161	4.62	0.630	0.090	2.60
OS-3	39,407	0.905	0.00141	0%	0	0%	0.000	86%	0.778	14%	0.127	1.127	0.085	2.79	0.552	0.042	1.53	0.204	0.015	0.58
A	18,842	0.433	0.00068	0%	0	100%	0.433	0%	0	0%	0.000	0.670	0.024	0.88	0.220	0.008	0.33	0.010	0.000	0.01
B	497,328	11.417	0.01784	0%	0	100%	11.417	0%	0	0%	0.000	0.670	0.637	23.18	0.220	0.209	8.68	0.010	0.010	0.34
<b>Total</b>	<b>812,940</b>	<b>18.663</b>	<b>0.02916</b>										<b>1.678</b>	<b>51.96</b>		<b>0.838</b>	<b>26.95</b>		<b>0.356</b>	<b>10.35</b>

Notes:

**Post-Developed Basins**

Basin	Basin Descriptions											100-Year, 6-Hr			10-Year, 6-Hr			2-Year, 6-Hr		
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
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A-1	16,552	0.380	0.00059	0%	0	0%	0.000	80%	0.304	20%	0.076	1.186	0.038	1.20	0.600	0.019	0.67	0.240	0.008	0.27
B-1	141,122	3.240	0.00506	0%	0	0%	0.000	10%	0.324	90%	2.916	1.872	0.505	13.67	1.160	0.313	8.91	0.660	0.178	5.08
B-2	158,400	3.636	0.00568	0%	0	0%	0.000	10%	0.364	90%	3.273	1.872	0.567	15.35	1.160	0.352	10.00	0.660	0.200	5.70
B-3	97,997	2.250	0.00352	0%	0	0%	0.000	0%	0	100%	2.250	1.970	0.369	9.83	1.240	0.232	6.50	0.720	0.135	3.80
B-4	102,116	2.344	0.00366	0%	0	0%	0.000	100%	2.344	0%	0.000	0.990	0.193	6.73	0.440	0.086	3.49	0.120	0.023	1.10
<b>Total</b>	<b>812,958</b>	<b>18.663</b>	<b>0.02916</b>					<b>4.582</b>		<b>14.081</b>			<b>2.690</b>	<b>74.68</b>		<b>1.623</b>	<b>47.52</b>		<b>0.891</b>	<b>25.95</b>

Notes:

**Equations:**

Weighted E =  $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d / (\text{Total Area})$

Volume = Weighted D \* Total Area

Flow =  $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

First Flush Volumes for Onsite Basins

Basin ID	Area (ac)	First Flush Volume (cu-ft)
A-1	0.38	0.01
B-1	3.24	0.12
B-2	3.64	0.13
B-3	2.25	0.08
B-4	2.34	0.09
<b>Total</b>	<b>11.85</b>	<b>0.43</b>

Ac/ft

Onsite Pond (South Property Line)

Stage-Storage-Discharge Table

Elevation	Water Depth (ft)	Contour Area (sf)	Volume (cu-ft)	Volume (ac-ft)	Outlet Flow $Q_{max}$ (cfs)	Notes
5,090.00	0	0.0	0.00	0.0000	0.000	← Pond bottom and outlet pipe invert
5,090.25	0.25	616.5	77.06	0.0018	0.000	
5,090.50	0.5	3,189.5	552.82	0.0127	0.000	
5,090.75	0.75	10,081.4	2,211.68	0.0508	0.000	
5,091.00	1	16,619.0	5,549.23	0.1274	0.000	
5,091.25	1.25	18,604.3	9,952.14	0.2285	0.000	
5,091.50	1.5	21,242.3	14,932.97	0.3428	0.000	
5,091.75	1.75	24,136.2	20,605.29	0.4730	0.000	← First flush requirement = 0.43 ac-ft, therefore okay
5,092.00	2	35,502.0	28,060.07	0.6442	0.000	
5,092.25	2.25	36,263.3	37,030.73	0.8501	1.211	
5,092.50	2.5	37,028.0	46,192.15	1.0604	1.277	
5,092.75	2.75	37,796.2	55,545.18	1.2751	1.339	
5,093.00	3	39,092.0	65,156.21	1.4958	1.399	
5,093.25	3.25	40,170.8	75,064.06	1.7232	1.456	
5,093.50	3.5	41,321.6	85,250.62	1.9571	1.511	
5,093.75	3.75	42,544.7	95,733.90	2.1977	1.564	
5,094.00	4	43,876.0	106,536.49	2.4457	1.615	
5,094.25	4.25	45,264.3	117,679.02	2.7015	1.665	← Total Volumetric Runoff = 2.69 ac-ft, therefore okay. Peak allowable discharge = 1.19 ac-ft, therefore okay
5,094.50	4.5	46,729.1	129,178.18	2.9655	1.713	
5,094.75	4.75	48,270.6	141,053.14	3.2381	1.760	
5,095.00	5	49,514.0	153,276.22	3.5187	1.806	
5,095.25	5.25	50,997.8	165,840.19	3.8072	1.851	
5,095.50	5.5	52,512.0	178,778.92	4.1042	1.894	
5,095.75	5.75	54,056.1	192,099.93	4.4100	1.937	
5,096.00	6	56,282.0	205,892.20	4.7266	1.978	← Top of pond

Orifice Equations

$C = 0.61$  (per DPM)  
 $A = 0.165$  sf  
 $g = 32.2$  ft/s<sup>2</sup>  
 $H =$  Head above top of pipe, ft

5.5 inch diameter orifice/pipe

Allowable Peak Discharge = 0.1 cfs/ac

$Q_{max} = 11.85 \text{ ac} \times 0.1 = 1.19 \text{ cfs}$

K10 D008A Old Dominion  
1.8765 ~ 840 gpm

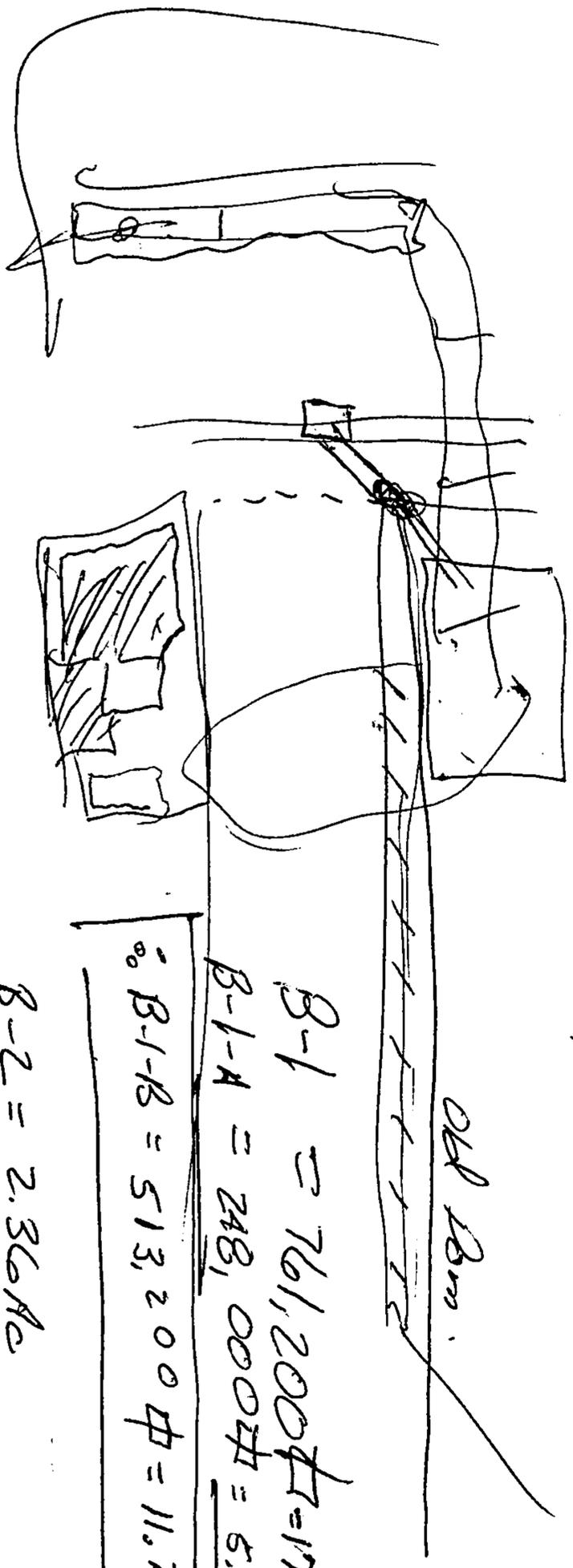
20 PC 101 9583

K10 D008 west K10 D020 EAST

K10 D018 Stack  
D018A SW

438395 SDS  
438392 SW

Hubbells Plaza  
Tract A-1A-1



B-1 = 761,200 ft = 17.47 Ac  
B-1-A = 248,000 ft = 5.64 Ac  
B-1-B = 513,200 ft = 11.78 Ac  
B-2 = 2.36 Ac

**DRB CASE ACTION LOG - BLUE SHEET**

- Preliminary/Final Plat [FP]
- Site Plan - Subdivision [SPS]
- Site Plan - Building Permit [SBP]

This sheet must accompany your plat or site plan to obtain delegated signatures. Return sheet with site plan/plat once comments have been addressed.

Project #: 1009597 Application #: 13DRB-70453  
Project Name: Juan Armijo Addition  
Agent: Jack's High Country Inc. Phone #:

**\*\*Your request was approved on \_\_\_\_\_ by the DRB with delegation of signature(s) to the following departments - outstanding comments to be addressed\*\***

**TRANSPORTATION:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ABCWUA:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CITY ENGINEER / AMAFCA:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**PARKS / CIP:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**PLANNING (Last to sign):** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**PLATS:**

- Planning must record this plat. Please submit the following items:
  - The original plat and a mylar copy for the County Clerk.
  - Tax certificate from the County Treasurer.
  - Recording fee (checks payable to the County Clerk). **RECORDED DATE:** \_\_\_\_\_
  - Tax printout from the County Assessor.
  - County Treasurer's signature must be obtained prior to the recording of the plat with County Clerk.
- Property Management's signature must be obtained prior to Planning Department's signature.
- AGIS DXF File approval required.
- Copy of recorded plat for Planning.

**ALL SITE PLANS:**

- 3 copies of the approved site plan. Include all pages.

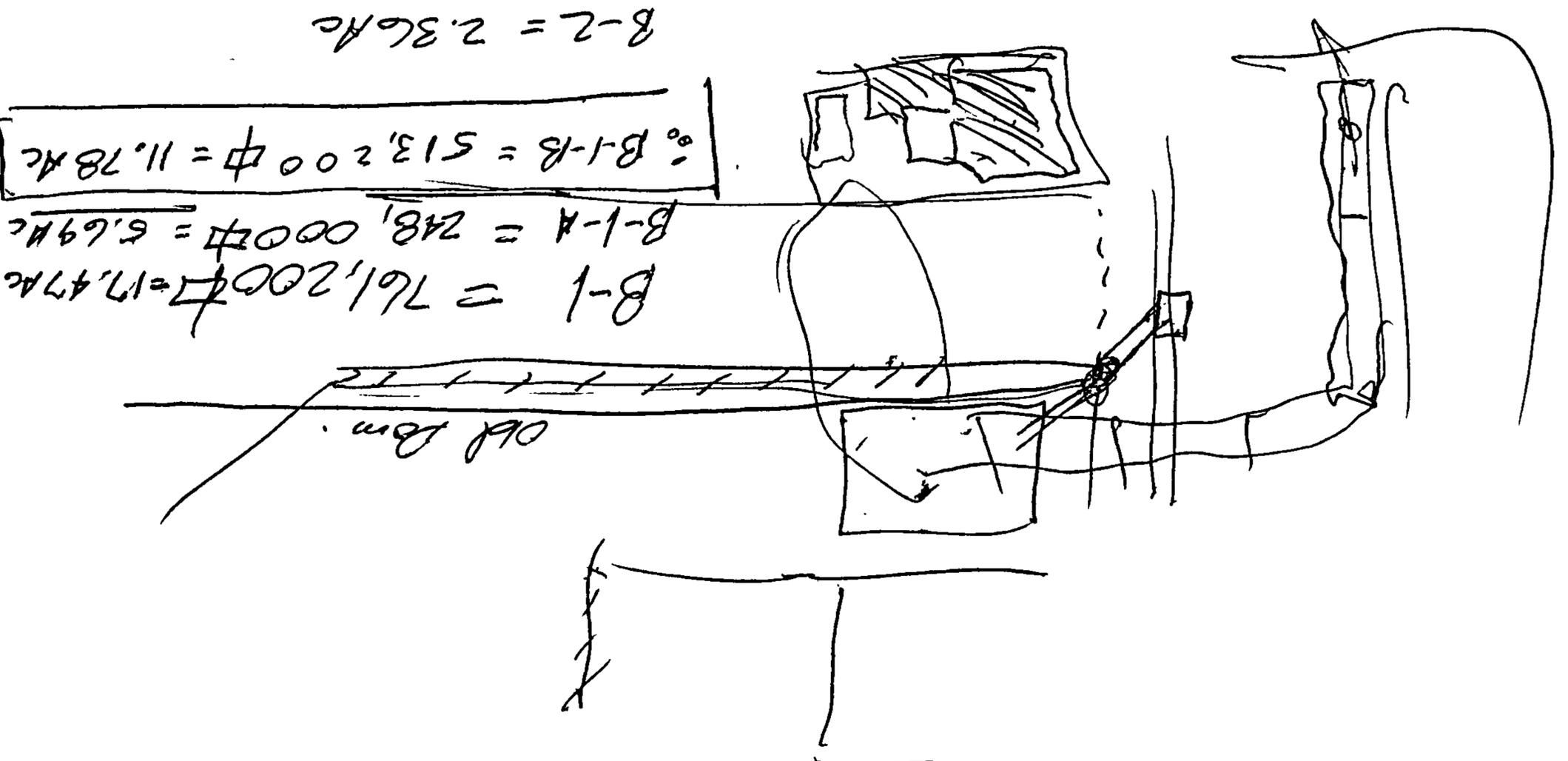
K10  
D008A  
 Old Dominion  
 1.875 ~ 840pm

\*\*\*  
 ? PC 1019583

K100020 EAST  
 0200  
 K100018 Stack  
 D018A SW

438395 SDS  
 438392 SW

Hubbell  
 Tract A-1A-1



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Phone #:

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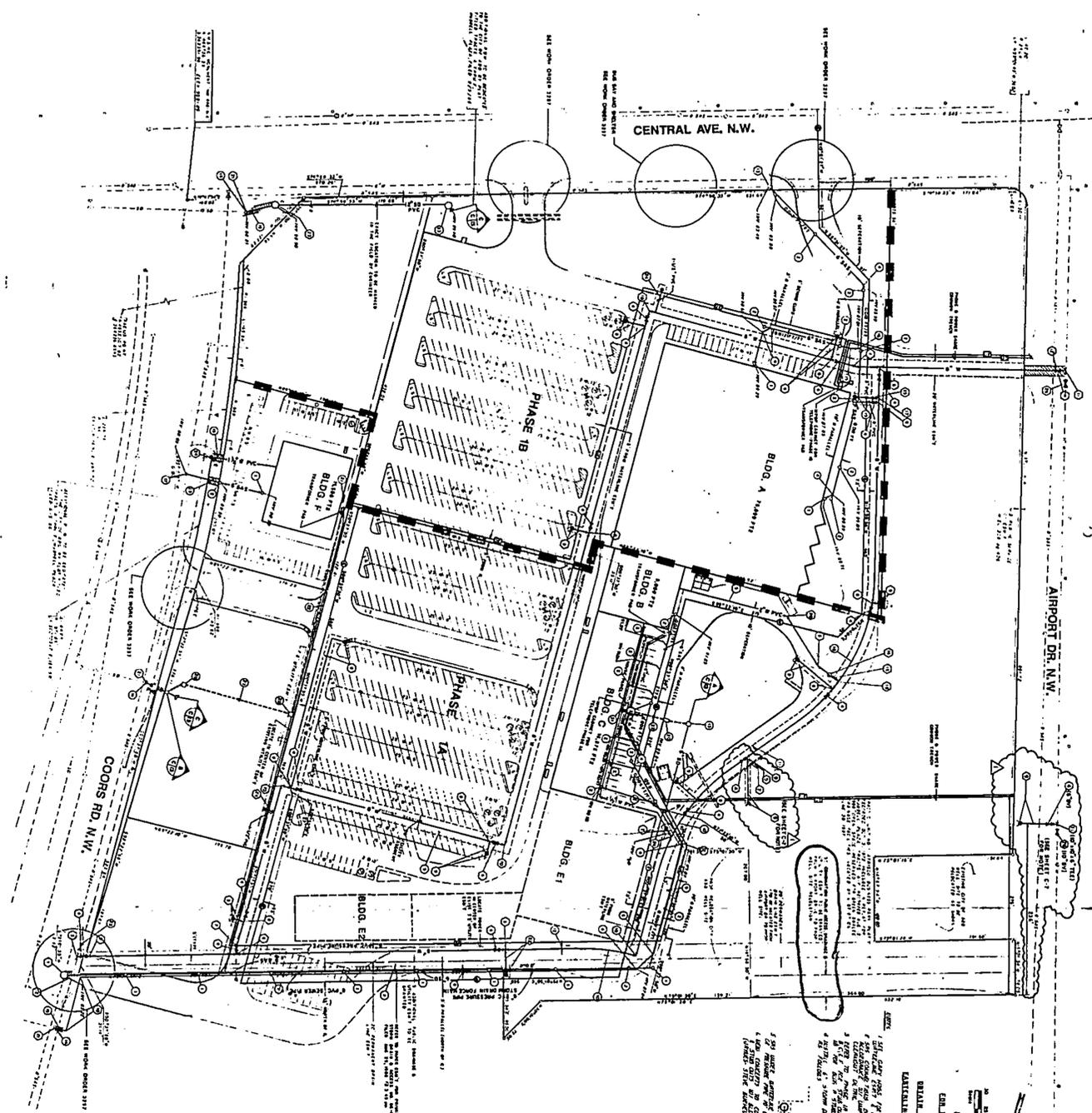
- TRANSPORTATION:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- ABCWUA:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- CITY ENGINEER / AMAFCA:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- PARKS / CIP:** \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
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- 3 copies of the approved site plan. Include all pages.



1. THE SHOWN UTILITIES ARE BASED UPON THE RECORD DRAWINGS AND FIELD SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.

2. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.

3. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF GRANULAR FILL.

4. ALL UTILITIES SHALL BE MARKED WITH PIPES OR CABLES.

5. ALL UTILITIES SHALL BE MAINTAINED AT ALL TIMES.

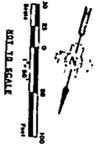
6. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.

7. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.

8. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.

9. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.

10. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.



SCALE: 1" = 10' (GENERAL)  
 SCALE: 1" = 20' (DETAILS)

**NOTES:**

1. THE SHOWN UTILITIES ARE BASED UPON THE RECORD DRAWINGS AND FIELD SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
2. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
3. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF GRANULAR FILL.
4. ALL UTILITIES SHALL BE MARKED WITH PIPES OR CABLES.
5. ALL UTILITIES SHALL BE MAINTAINED AT ALL TIMES.
6. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.
7. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.
8. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.
9. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.
10. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF DENVER SPECIFICATIONS.

**LEGEND:**

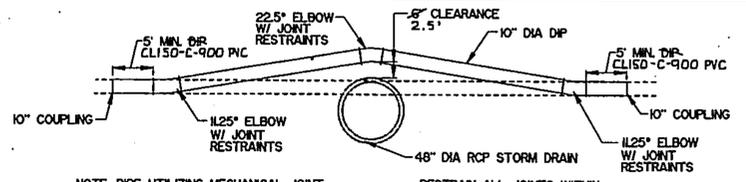
- WATER MAIN
- SEWER MAIN
- GAS MAIN
- STORM WATER MAIN
- ELECTRICAL CABLE
- TELEPHONE CABLE
- FIBER OPTIC CABLE
- FIRE ALARM CABLE
- SECURITY CABLE
- TELEVISION CABLE
- RADIO CABLE
- ANTENNA CABLE
- LIGHTING CABLE
- SIGNALING CABLE
- DATA CABLE
- VIDEO CABLE
- AUDIO CABLE
- CONTROL CABLE
- POWER CABLE
- GROUNDING CABLE
- BONDING CABLE
- SHIELDING CABLE
- PROTECTIVE CABLE
- IDENTIFICATION CABLE
- MARKING CABLE
- LABELING CABLE
- RECORDING CABLE
- STORAGE CABLE
- RETRIEVAL CABLE
- TRANSMISSION CABLE
- RECEPTION CABLE
- PROCESSING CABLE
- DISTRIBUTION CABLE
- COLLECTION CABLE
- CONVERSION CABLE
- STORAGE CABLE
- RETRIEVAL CABLE
- TRANSMISSION CABLE
- RECEPTION CABLE
- PROCESSING CABLE
- DISTRIBUTION CABLE
- COLLECTION CABLE
- CONVERSION CABLE

26 52970488

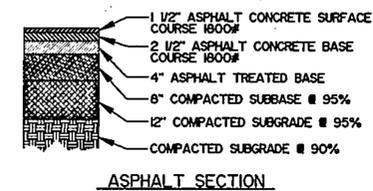
NO.	DATE	DESCRIPTION	BY	CHECKED
1	10/1/78	ISSUED FOR PERMITS	J. COORS	
2	10/1/78	ISSUED FOR CONSTRUCTION	J. COORS	
3	10/1/78	ISSUED FOR RECORD	J. COORS	

**COORS & CENTRAL SHOPPING CENTER - PHASE 1A & 1B SITE UTILITY PLAN**  
 EASTMAN & ASSOCIATES, INC.  
 OPERATING ENGINEERS  
 1400 17TH AVENUE, SUITE 100  
 DENVER, COLORADO 80202  
 DATE: AUGUST 1978  
 SHEET: C4

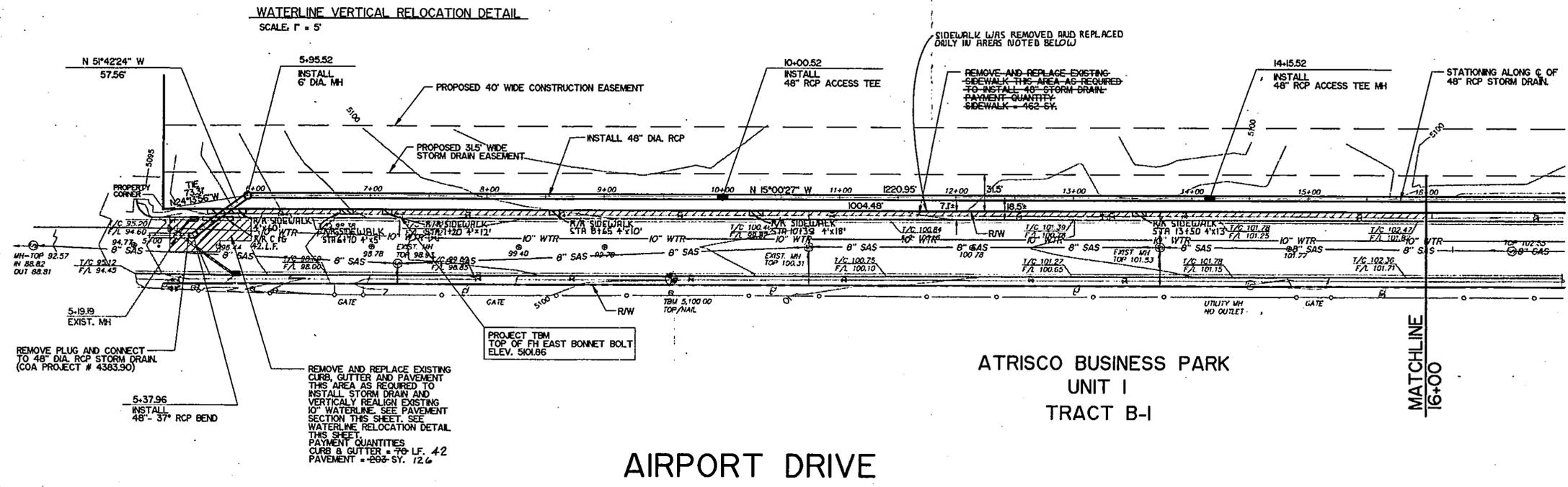




ATRISCO BUSINESS PARK  
UNIT 2  
PARCEL C

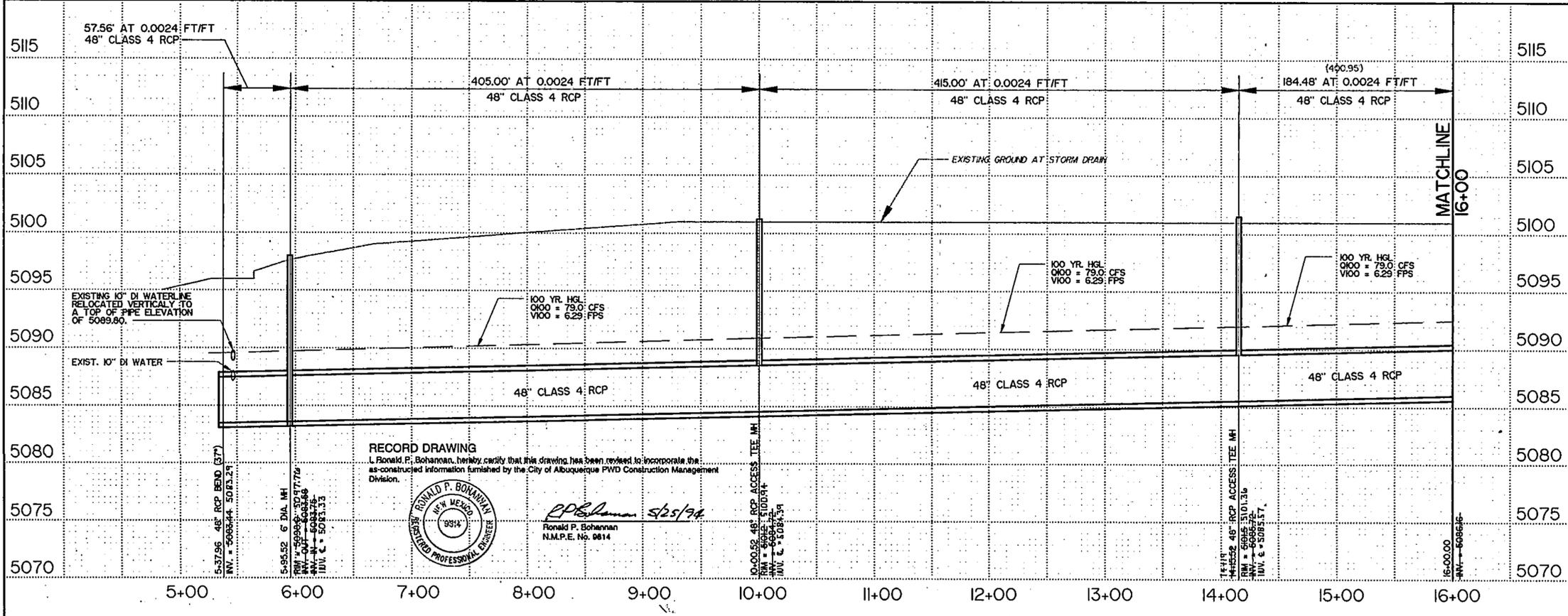


NOTES:  
1. REINFORCED CONCRETE PIPE WYE CONNECTIONS AND BENDS SHALL BE FACTORY FABRICATED.



AIRPORT DRIVE

ATRISCO BUSINESS PARK  
UNIT 1  
TRACT B-1



RECORD DRAWING  
I, Ronald P. Bohannon, hereby certify that this drawing has been revised to incorporate the as-constructed information furnished by the City of Albuquerque PWD Construction Management Division.

RONALD P. BOHANNON  
REGISTERED PROFESSIONAL ENGINEER  
N.M.P.E. No. 0814

5/25/94

LEGEND

REMOVAL AND REPLACEMENT PAYMENT AREA

EXISTING FEATURES

- FIRE HYDRANT
- WATER VALVE
- WATER METER
- SEWER MANHOLE
- UTILITY POLE
- TREE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

26-4383-1910299

1 inch = 60 ft. (horiz.)  
1 inch = 6 ft. (vert.)

EASTERLING & ASSOCIATES, INC.  
CONSULTING ENGINEERS  
10131 Coors Rd., NW, Suite H - 7  
ALBUQUERQUE, NEW MEXICO 87114  
(505) 698-8021 FAX (505) 698-8501

CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING GROUP

TITLE:  
AIRPORT DRIVE / BLUEWATER ROAD  
STORM DRAIN PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair	<i>[Signature]</i>	5-17-93	WATER	<i>[Signature]</i>	4-21-93
TRANS. DEV.	<i>[Signature]</i>	5-03-93	WASTE WATER	<i>[Signature]</i>	4-22-93
HYDROLOGY	<i>[Signature]</i>	5-06-93	TRAF. OPER.		

PROJECT NO. 4383.92 MAP NO. K-10 SHEET 2 OF 5

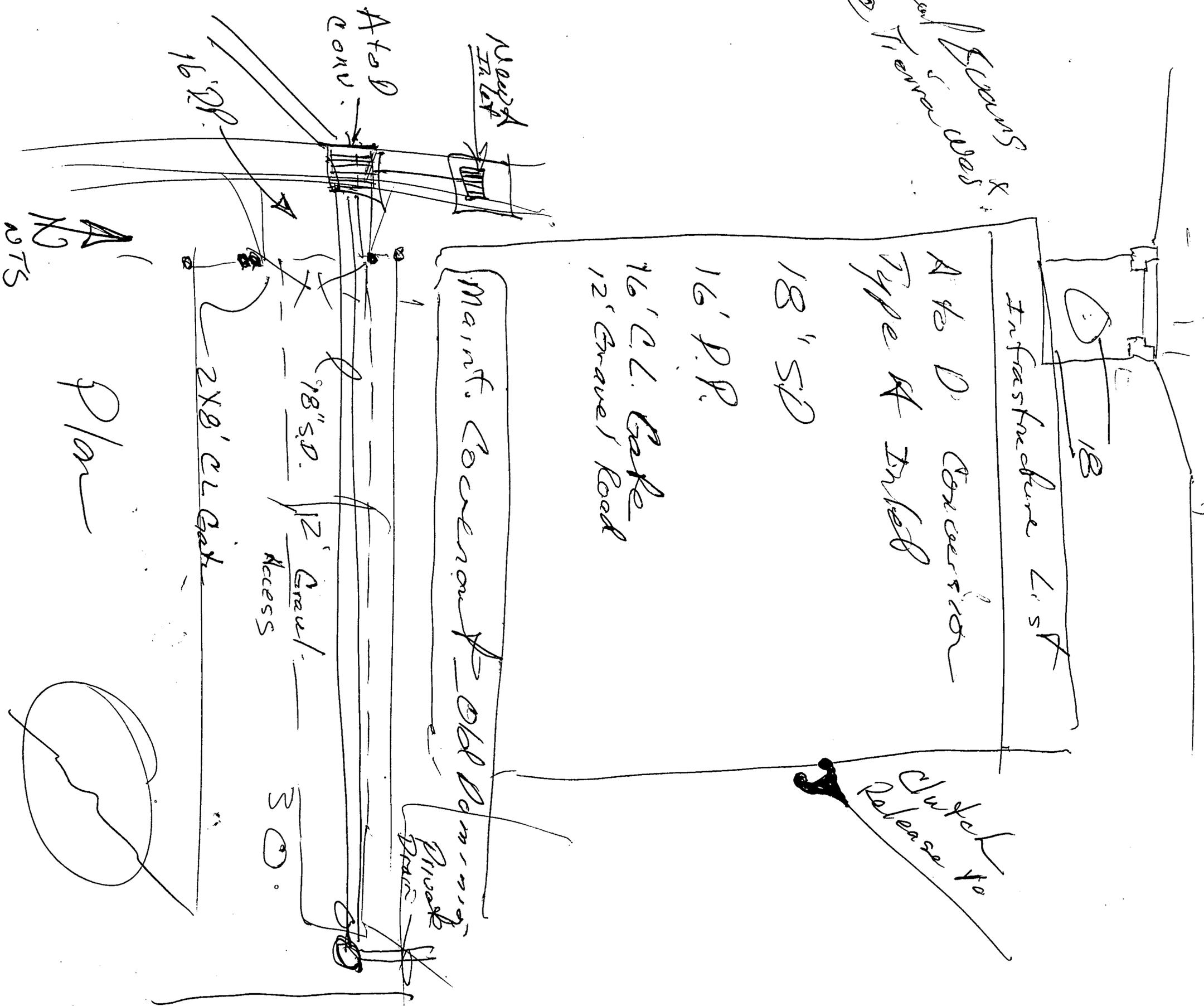
AS BUILT INFORMATION		SURVEY INFORMATION		ENGINEERS SEAL	
CONTRACTOR	Stinson & McCall	STATION NAME	140-20A	NO.	
WORK STARTED BY	C.O.A.	DATE		BY	
ACCEPTANCE BY	E. SMITH	DATE		NO.	
FIELD ECTION BY	C.O.A.	DATE		REVISIONS	
DRAWN BY	E.A.T.	DATE		DATE	
CHECKED BY		DATE		DESIGNED BY	V.S.F. / DEC. APRIL 1993
RECORDED BY		DATE		DRAWN BY	V.S.F. / DEC. APRIL 1993
				CHECKED BY	V.S.F. / R.P.B. APRIL 1993





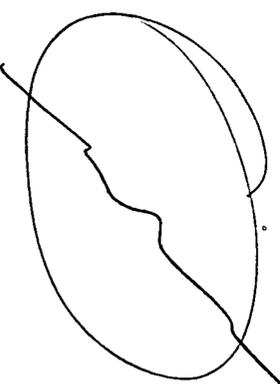
Old  
Deminer S.D.  
Public

Scams &  
Fences @



A  
K  
275

Plan



C34-66(53)

87101431  
TRACTS A-1, A-2 AND B-1 THRU E-1  
(REPLAT OF TRACTS A THRU F, HUBBELL PLAZA  
AND OF TRACT C-27, AIRPORT UNIT OF THE TOWN OF ATRISCO GRANT)  
**HUBBELL PLAZA**  
CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO

AUGUST, 1987

State of New Mexico }  
County of Bernalillo } SS  
This instrument was filed for recording  
on **SEP 29 1987**  
at the County Clerk's Office  
of Bernalillo County, New Mexico  
at **1:16** PM  
Deputy Clerk

Detail "A"  
Scale 1" = 40'

ATRISCO BUSINESS PARK  
JULY 6 1979 B16 153

ATRISCO BUSINESS PARK  
OCT. 31 1972 D-5 62

NOTE: TRACT A-2 TO BE DEDICATED TO  
THE CITY OF ALBUQUERQUE BY  
THIS PLAT - 0.5242 Ac.

30' ACCESS, UTILITY & PUBLIC  
DRAINAGE EASEMENT TO BE DEDICATED  
TO THE CITY OF ALBUQUERQUE BY THIS PLAT.

See Detail "A"  
Sheet 3 of 4

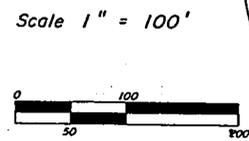
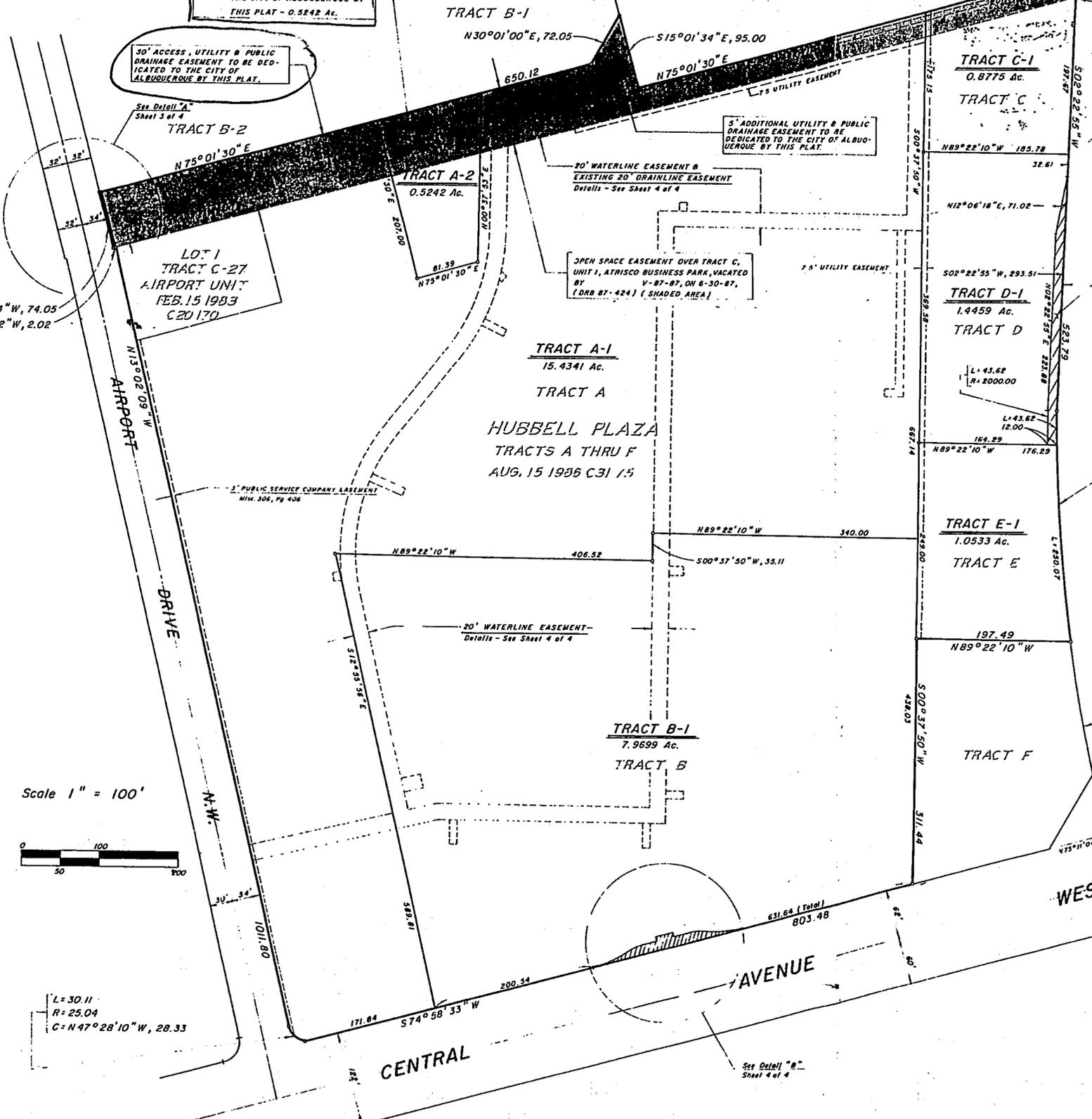
5' ADDITIONAL UTILITY & PUBLIC  
DRAINAGE EASEMENT TO BE  
DEDICATED TO THE CITY OF ALBUQUERQUE  
BY THIS PLAT.

20' WATERLINE EASEMENT &  
EXISTING 20' DRAINLINE EASEMENT  
Details - See Sheet 4 of 4

OPEN SPACE EASEMENT OVER TRACT C,  
UNIT 1, ATRISCO BUSINESS PARK, VACATED  
BY V-87-87, ON 6-30-87,  
(DRR 87-424) (SHADDED AREA)

ADDITIONAL R/W TO BE DEDICATED  
TO THE CITY OF ALBUQUERQUE BY  
THIS PLAT - 0.0832 Ac.

ADDITIONAL R/W TO BE DEDICATED  
TO THE CITY OF ALBUQUERQUE BY  
THIS PLAT - 0.0034 Ac.



L=30.11  
R=25.04  
C=N47°28'10"W, 28.33

See Detail "B"  
Sheet 4 of 4

C34-166(4)

87101431

TRACTS A-1, A-2 AND B-1 THRU E-1

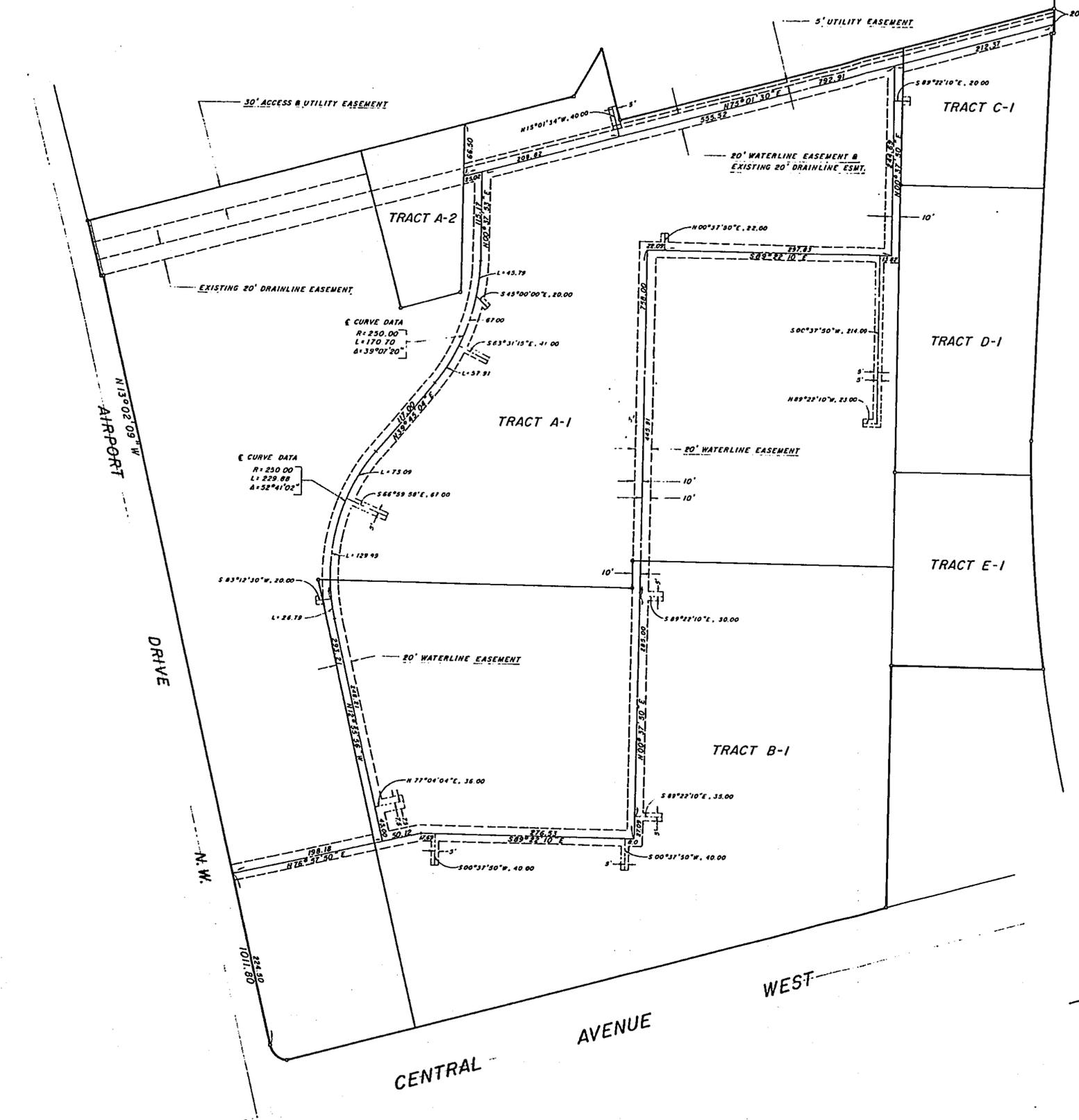
(BEING A REPLAT OF TRACTS A THRU F, HUBBELL PLAZA AND LOT 1, OF TRACT C-27, AIRPORT UNIT OF THE TOWN OF ATRISCO GRANT)

HUBBELL PLAZA

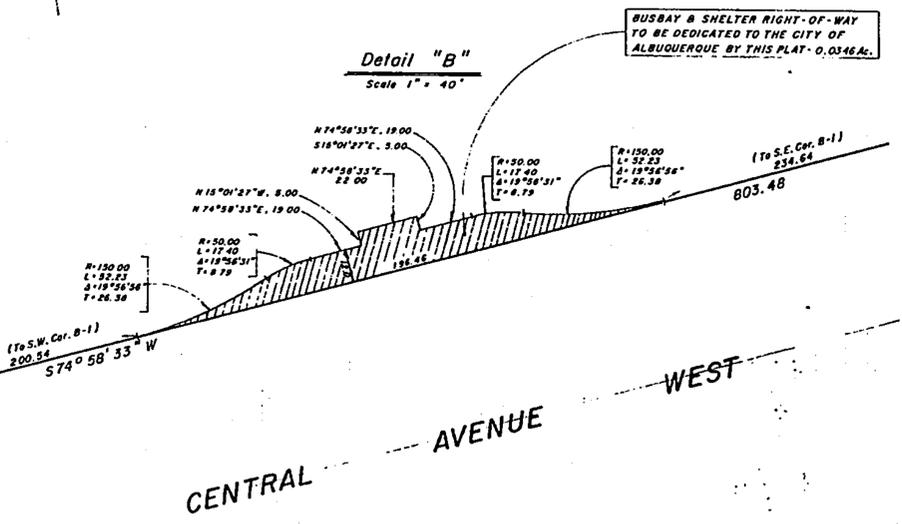
CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO

AUGUST, 1987

State of New Mexico  
County of Bernalillo  
This instrument was filed for record  
SEP 29 1987  
C34  
166



Scale 1" = 100'



EASEMENT DETAIL

SHEET 4 OF 4

**Hugg Surveying Inc.**  
4100 Southern Blvd., S.E., Suite 180-C Rio Rancho, New Mexico 87124  
Phone: (505) 892-9800



VICINITY MAP  
NTS

GENERAL NOTES

1. Bearings are grid and based on the New Mexico State Plane Coordinate System, Central Zone, and rotated to grid at the New Mexico State Highway Commission Monument "NM-448-N1A".
2. Distances are ground.
3. Distances along curved lines are arc lengths.
4. Delta Alpha = -00° 15' 52"
5. Combined ground to grid factor = 0.99967813
6. All corners are a 5/8" rebar and survcap stamped "HUGG LS 5823" unless otherwise indicated.
7. Zone Atlas Page K-10

DRB-87-605

NOTE

1. There is a reciprocal access, utility, drainage and parking agreement for the entire Hubbell Plaza plat contained in the restrictive covenants filed in the office of the County Clerk of Bernalillo County, New Mexico, on July 18, 1986, in Volume Misc. 373A, pages 732-758.

DECLARATION

The purpose of this replat is to move the proposed City of Albuquerque Well Site, to dedicate additional street right of way to the City of Albuquerque in fee simple and to grant additional easements shown hereon.

LEGAL DESCRIPTION

That certain parcel of land situate within the Town of Atrisco Grant in projected Section 22, Township 10 North, Range 2 East, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico, being and comprising Tracts A, B, C, D and E, Hubbell Plaza, as the same is shown and designated on the plat entitled "TRACTS A THRU F, HUBBELL PLAZA, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO", filed in the office of the County Clerk of Bernalillo County, New Mexico, on August 15, 1986, in Volume C31, folio 75, TOGETHER WITH Lot 1 of Tract C-27, Airport Unit of the Town of Atrisco Grant, as the same is shown and designated on the plat entitled "LOTS 1 & 2 OF TRACT C-27, AIRPORT UNIT OF THE TOWN OF ATRISCO GRANT" filed in the office of the County Clerk of Bernalillo County, New Mexico, on February 15, 1983, in Volume C 20, folio 170, more particularly described as follows:

BEGINNING at the Southeast corner of said Tract B and the Southeast corner of the parcel herein described, a point on the Northerly right of way line of Central Avenue West, whence the New Mexico State Highway Commission Monument "NM-448-N1A" bears N 75° 11' 04" E, 336.63 feet distant; Thence,

S 74° 58' 33" W, 803.48 feet along said Northwesterly right of way line of Central Avenue West to a point on curve on the Easterly right of way line of Airport Drive N. W.; Thence,

Northwesterly, 30.11 feet along said Easterly right of way line of Airport Drive N. W. on the arc of a curve to the right (said curve having a radius of 25.04 feet and a chord which bears N 47° 28' 10" W, 28.33 feet to a point of tangency; Thence,

N 13° 02' 09" W, 1011.80 feet along said Easterly right of way line of Airport Drive N. W. to a point; Thence,

S 75° 04' 42" W, 2.02 feet along said Easterly right of way line of Airport Drive N. W. to a point; Thence,

N 15° 01' 43" W, 74.05 feet along said Easterly right of way line of Airport Drive N. W. to the Northwest corner of said Tract A and the Northwest corner of the parcel herein described; Thence,

N 75° 01' 30" E, 650.12 feet along the Northerly line of said Tract A to a point; Thence,

N 30° 01' 00" E, 72.05 feet along said Northerly line of Tract A to a point; Thence,

S 15° 01' 34" E, 95.00 feet along said Northerly line of Tract A to a point; Thence,

N 75° 01' 30" E, 584.70 feet along said Northerly line of Tract A and the Northerly line of said Tract C to the Northeast corner of said Tract C, a point on the Westerly right of way line of Coors Road North, and the Northeast corner of the parcel herein described; Thence Southerly along said Westerly right of way line of Coors Road North on the following four (4) courses,

S 00° 37' 50" W, 31.14 feet to a point; Thence,

S 75° 01' 30" W, 2.82 feet to a point; Thence,

S 02° 22' 55" W, 523.79 feet to a point of curvature; Thence,

Southeasterly, 293.69 feet on the arc of a curve to the left (said curve having a radius of 1988.00 feet and a chord which bears S 03° 36' 26" E, 293.42 feet) to a point on curve, said point being the Southeast corner of said Tract E; Thence,

N 89° 22' 10" W, 197.49 feet along the Southerly line of said Tract E to the Southwest corner of said Tract E, a point on the Easterly line of said Tract B; Thence,

S 00° 37' 50" W, 311.44 feet along said Easterly line of Tract B to the Southeast corner and point of beginning of the parcel herein described.

Said parcel contains 27.4217 acres, more or less.

87101481

TRACTS A-1, A-2 AND B-1 THRU E-1

(BEING A REPLAT OF TRACTS A THRU F, HUBBELL PLAZA

AND LOT 1, OF TRACT C-27, AIRPORT UNIT OF THE TOWN OF ATRISCO GRANT)

This instrument was filed for record on

SEP 29 1987  
HUGG SURVEYING, INC.  
RECORDED IN VOLUME C34  
OF RECORDS OF SAID COUNTY

HUBBELL PLAZA  
CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO

AUGUST, 1987

APPROVALS

*David W. Harman* 9-7-87  
Traffic Engineer, City of Albuquerque  
Public Works Department Date

*Neil White* 082487  
Chief City Surveyor, City of Albuquerque  
Public Works Department Date

*W. J. [Signature]* 8-18-87  
Utility Development Division, City of  
Albuquerque Public Works Department Date

*Frank J. [Signature]* 9-14-87  
Albuquerque Metropolitan Arroyo Flood  
Control Authority Date

*Frank J. [Signature]* 9-14-87  
City Engineer, City of Albuquerque  
Public Works Department Date

*Rosie [Signature]* 9-17-87  
Property Management, City of Albuquerque  
Date

*Janet [Signature]* 8-18-87  
Parks and Recreation Department, City  
of Albuquerque Date

APPROVAL as specified by the Albuquerque Subdivision  
Ordinance.

*Jack [Signature]* 9-22-87  
Chairman, Albuquerque/Bernalillo County  
Development Review Board Date

5P-87-325

SURVEYORS CERTIFICATION

I, Garry P. Hugg, New Mexico Professional Land Surveyor Number 5823, hereby certify that this plat of survey was prepared from field notes of an actual ground survey performed by me or under my supervision; that it meets the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Land Surveyors; that it meets the minimum requirements for surveys and monumentation of the Albuquerque Subdivision Ordinance; that it shows all easements of record; and that it is true and correct to the best of my knowledge and belief.

*Garry P. Hugg*  
Garry P. Hugg  
NMPLS No. 5823  
August 7, 1987



C 34-166(2)

C 34-166(2)

87101481

TRACTS A-1, A-2 AND B-1 THRU E-1

(BEING A REPLAT OF TRACTS A THRU F, HUBBELL PLAZA AND LOT 1, OF TRACT C-27, AIRPORT UNIT OF THE TOWN OF ATRISCO GRANT)

HUBBELL PLAZA  
CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO

AUGUST, 1987

State of New Mexico } SS  
County of Bernalillo }  
I, Louetta P. Chazy, Notary Public,  
do hereby certify that the foregoing is a true and correct copy of the original as recorded in my office.  
SEP 29 1987  
L.P. Chazy, Notary Public  
Depot Bldg.

SURVEYED and REPLATTED and now comprising TRACTS A-1, A-2 AND B-1 THRU E-1, (BEING A REPLAT OF TRACTS A THRU F, HUBBELL PLAZA AND LOT 1, OF TRACT C-27, AIRPORT UNIT OF THE TOWN OF ATRISCO GRANT), HUBBELL PLAZA, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, with the free consent of and in accordance with the wishes and desires of the undersigned owner(s) and proprietor(s) thereof. Said owner(s) and proprietor(s) do hereby consent to all of the foregoing and do hereby certify that they are so authorized to act, and do hereby dedicate to the City of Albuquerque in fee simple all additional right of way shown hereon, and do hereby grant all additional utility easements shown hereon to the City of Albuquerque.

Werner Kindermann  
Werner Kindermann by Peter Reimann, his attorney-in-fact

COORS CENTRAL, LTD.

Greg L. Foltz  
Greg L. Foltz, General Partner

CITY OF ALBUQUERQUE  
Chief Administrative Officer  
City of Albuquerque

ATTEST  
By: \_\_\_\_\_  
Municipal Clerk, City of Albuquerque

ACKNOWLEDGEMENT

STATE OF NEW MEXICO  
COUNTY OF BERNALILLO SS

On this 7th day of August, 1987, before me the undersigned, a Notary Public, personally appeared Greg L. Foltz, to me known to be a General Partner in Coors Central, Ltd., who acknowledged to me that he signed and sealed the accompanying instrument on behalf of said partnership.

Louetta P. Chazy  
Notary Public

NOTE: Prior to development, City of Albuquerque Water and Sanitary Sewer Service to these tracts must be verified and coordinated with the Public Works Department, City of Albuquerque, via a request for a water and sanitary sewer availability statement.

ACKNOWLEDGEMENT

STATE OF New Mexico SS  
COUNTY OF Bernalillo

On this 15th day of August, 1987, before me the undersigned, a Notary Public, personally appeared Peter Reimann, known by me to be attorney-in-fact for Werner Kindermann, who acknowledged to me that he signed and sealed the accompanying instrument as his free and voluntary act and deed on behalf of said Werner Kindermann.

Louetta P. Chazy  
Notary Public

ACKNOWLEDGEMENT

STATE OF NEW MEXICO  
COUNTY OF SANDOVAL SS

On this 7th day of August, 1987, before me the undersigned, a Notary Public, personally appeared Garry P. Hugg, to me known to be New Mexico Professional Land Surveyor Number 5823, who acknowledged to me that he signed and sealed the accompanying Surveyors Certification as his free and voluntary act and deed.

Louetta P. Chazy  
Notary Public

ACKNOWLEDGEMENT

STATE OF NEW MEXICO  
COUNTY OF SANDOVAL SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, before me the undersigned, a Notary Public, personally appeared \_\_\_\_\_, to me known to be Chief Administrative Officer of the City of Albuquerque, who acknowledged to me that he signed and sealed the accompanying instrument on behalf of said City of Albuquerque and that he is so authorized to act.

Notary Public

