

Z \2004\24086\Drawngs DPB\24086-6PB dwy, 6/19/2007 3 44 20 PM, Yero

CITY OF ALBUQUERQUE



Planning Department Transportation Development Services Section

April 23, 2008

George R. Rainhart, Registered Architect 2325 San Pedro NE, Suite 2-B Albuquerque, NM 87110

Re:

Sincerely

Certification Submittal for Final Building Certificate of Occupancy for

Walgreens at Ladera Industrial Center, [H-10 / D6A2]

2200 Unser NW

Architect's Stamp Dated 04/18/08

Dear Mr. Rainhart:

PO Box 1293

The TCL / Letter of Certification submitted on April 23, 2008 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Albuquerque

NM 87103

www.cabq.gov

Nilo E. Salgado Fernandez, P.E.

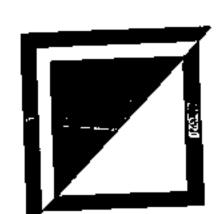
Senior Traffic Engineer

Development and Building Services

Planning Department

C:

Engineer
Hydrology file
CO Clerk



GEORGE RAINHART ARCHITECT & ASSOCIATES P.C.

JONATHAN STERN AIA

Associate

2325 SAN PEDRO NE, SUITE 2-B = ALBUQUERQUE, NM 87110
PHONE 505-884-9110 ext 110 = FAX 505-837-9877
Email Address jstern@gra-arch.com

but 50 en -sike wing melan pu plan 10 refun st dow propert at own appro

:

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (Rev. 12/2005)

H-10/D6A2

RB#: WALGREENS AT LADERA INDVS	
	WORK ORDER#:
GAL DESCRIPTION: LOTTC LADERA 11	VOUSTRIAL CENTER:
TY ADDRESS:	
GINEERING FIRM:	
ADDRESS:	CONTACT:PHONE:
CITY, STATE:	ZIP CODE:
	· · · · · · · · · · · · · · · · · · ·
VNER:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
CHITECT: GEORGE RANHART ARCHITE	CONTACT: JON STERN
ADDRESS: Z725 SAN PEORO NE SI	17E 28 PHONE: 884 -9/10 6X7 /10
ADDRESS: Z325 SAN PEORO NO SU CITY, STATE: ALBUQUERQUE NM	ZIP CODE: 87110
RVEYOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
NTRACTOR:	CONTULA COTA
ADDRESS:	CONTACT: PHONE:
CITY, STATE:	ZIP CODE:
	· · · · · · · · · · · · · · · · · · ·
PE OF SUBMITTAL: CHI	ECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT DRAINAGE PLAN 1 st SUBMITTAL:	SIA/FINANCIAL GUARANTEE RELEASE
DRAINAGE PLAN RESUBMITTAL	PRELIMINARY PLAT APPROVAL
CONCEPTUAL G & D PLAN	S. DEV. PLAN FOR SUB'D APPROVAL S. DEV: FOR BLDG. PERMIT APPROVAL
GRADING PLAN	SECTOR PLAN APPROVAL
EROSION CONTROL PLAN	FINAL PLAT APPROVAL
ENGINEER'S CERT (HYDROLOGY)	FOUNDATION PERMIT APPROVAL
CLOMR/LOMR	BUILDING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT	CERTIFICATE OF OCCUPANCY (PERM)
ENGINEER'S/ARCHITECT'S CERT (TCL) ENGINEER'S CERT (DRB SITE PLAN)	CERTIFICATE OF OCCUPANCY (TEMPERATOR)
OTHER	GRADING PERMIT APPROVATION TO PAVING PERMIT APPROVATION TO THE PAVING PERMIT APPROVATION TO THE PROPERTY OF THE PAVING PERMIT APPROVATION TO THE PAVING PERMIT APPROV
	WORK ORDER APPROVIDED TO THE WORK ORDER APPROVIDED TO THE WORK OF
	OTHER (SPECIFY) APR 23 2003
A PRE-DESIGN CONFERENCE ATTENDED:	
YES	HYDROLOGY
NO COPY PROVIDED	SECTION
MITTED BY:	DATE: 4.23.08

lequests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The articular nature, location and scope to the proposed development defines the degree of drainage detail. One or more of the following evels 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.

TRAFFIC CERTIFICATION

I, George Rainhart, NMPE OR NMRA NMRA, OF THE FIRM George Rainhart Architect & Associates, HEREBY CERTIFY THAT THIS PROJECT HAS IS IN DESIGN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED March 15, 2007. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY Jonathan Stern OF THE FIRM George Rainhart Architects . I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON April 4, 2008 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR Permanent Certificate of Occupancy.

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.

ENGINEER'S OR ARCHITECT'S STAMP

Signature of Engineer or Architect

1808

Date

OF NEW GEORGE R. RAINHART NO. 580 TERED

APR 23 7000 HYDROLOGY
SECTION

Sims, Timothy E.

From:

Ron Bohannan [rrb@tierrawestllc.com]

Sent:

Friday, January 25, 2008 3:21 PM

To:

Sims, Timothy E.

Cc:

Keli Krueger; Joel Hernandez; Steve Atkinson

Subject: Re: Walgreen's & Viste Oriente Temporary Certificate of Occupancy

Tim we are requesting the temporary certificate of occupancy for the Walgreen's located at the northeast corner of Unser and Viste Oriente. The work is in substantial completion of the approved grading plan and we will be certifying the final as soon as some minor punch list items are completed. If you have any questions please do not hesitate to call me.

Thanks

Ronald R. Bohannan 5571 Midway Park Place Albuquerque, NM 87109 505-858-3100 ext 203 800-245-3102

Page 1 of 1

W-10 DooloAZ

CITY OF ALBUQUERQUE



January 25, 2008

Ronald Ray Bohannan, P.E. **Tierra West, LLC.** 5571 Midway Park Place N.E. Albuquerque, NM 87109

Re: Walgreen's @ Ladera Industrial Park, 2200 Unser NW,

Request of Temporary Certificate of Occupancy (C.O.)

Engineer's Stamp dated 10/16/06 (H-10/D006A2)

Certification dated 1/14/08

Based upon the information provided in your submittal received 1/25/08, the above referenced certification is approved for release of 90 Day Temporary Certificate of Occupancy by Hydrology.

P.O. Box 1293

If you have any questions, you can contact me at 924-3982.

Albuquerque

Sincerely,

New Mexico 87103

Timothy Sims

Plan Checker, Hydrology

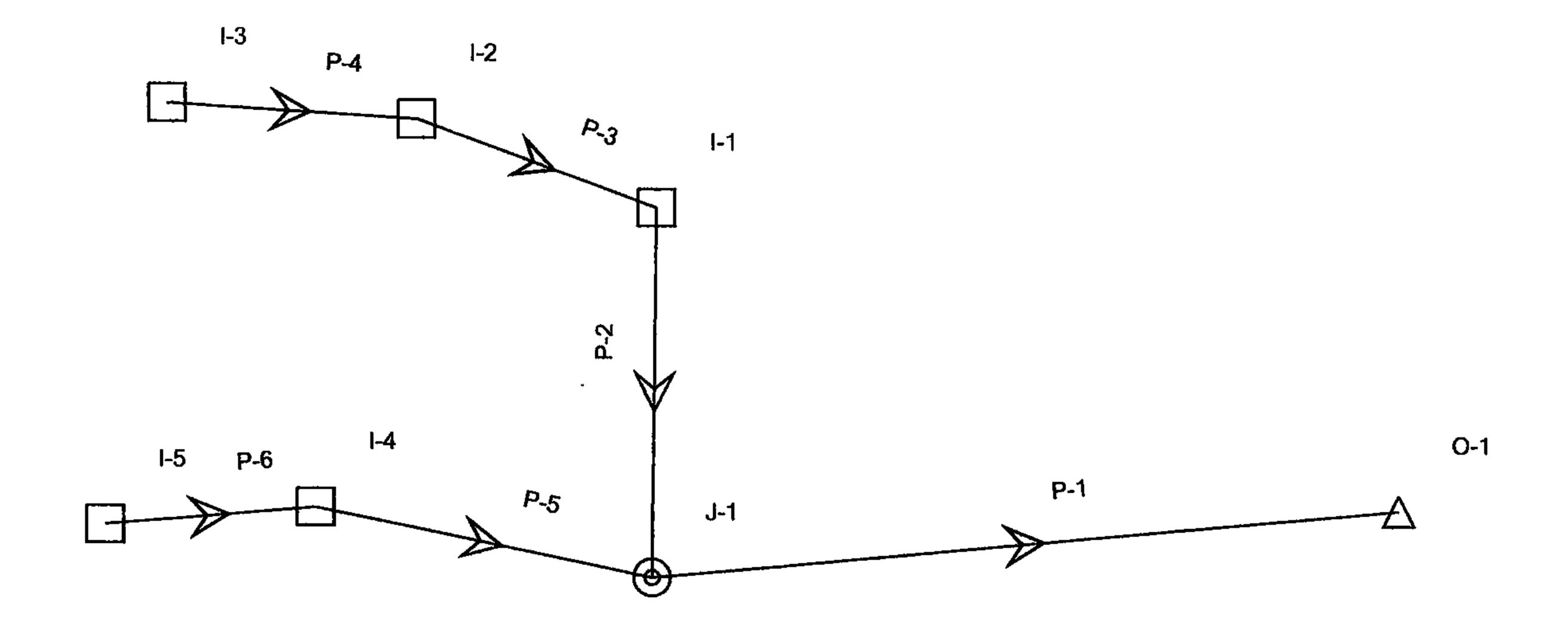
Development and Building Services

www.cabq.gov

C: CO Clerk—Katrina Sigala

File H-10/D006A2

Title: Print Preview





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

Ronald R. Bohannan, PE Tierra West, LLC 8509 Jefferson NE Albuquerque, NM 87113

Re: Ladera Industrial Park Lot 1 Drainage Report Engineer's Stamp 5-4-04, (H-9/D18) aka H-10 D6A2

Dear Mr. Bohannan:

Based on the information provided in your submittal received 5-4-04, the above referenced plan is approved for Site Development Plan for Subdivision. Prior to Building Permit, the following comments must be addressed:

- The plan shows the "New Type "E" Storm Sewer Manhole" as a low point. Please show a curb cut and concrete rundown from this point or change to a slotted lid manhole.
- Drainage to Vista Oriente Street is not allowed until it has been fully extended. Please contain runoff in an interim pond until the extension is complete.

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

Sincerely,
Budt L. Bihn

Bradley L. Bingham, PE

Principal Engineer, Planning Dept. Development and Building Services

C: file

July 20, 2007

Curtis Cherne, P.E.
Engineering Associate, Planning Dept.
Development Services
City of Albuquerque
Albuquerque, NM

Re: Walgreens #09715 98th and Unser Grading and Drainage Plan

Mr. Cherne:

Per one of the Hydrology permit approval conditions, I've enclosed a copy of the private maintenance agreement, titled "Private Facility Drainage Covenant". Please contact me if there are any further issues relating to this matter we need to take care of.

Thank you,

Jonathan Stern

George Rainhart, Architect & Associates

PRIVATE FACILITY DRAINAGE COVENANT

This Drainage Covenant, between Walgreen Co., an Illinois corporation ("Owner"), whose address is 104 Wilmot Road, MS 1420, Deerfield, IL 60015, and the City of Albuquerque, a New Mexico municipal corporation ("City"), whose address is P.O. Box 1293, Albuquerque, New Mexico 87103, is made in Albuquerque, Bernalillo County, New Mexico and is entered into as of the date Owner signs this Covenant.

1. <u>Recital.</u> The Owner is the owner of the following described real property located at the northeast corner of Unser Boulevard and Vista Oriente Street and more particularly described as follows:

LOT 1-C OF SUBDIVISION PLAT OF Lots 1-A, 1-B, 1-C AND 1-D, LADERA INDUSTRIAL CENTER, BEING A REPLAT OF LOT 1 LADERA INDUSTRIAL CENTER SITUATE WITHIN THE TOWN OF ATRISCO GRANT PROJECTED SECTION 9, T.10N.R.2.E., N.M.P.M., CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE REPLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JUNE 24, 2004 IN PLAT BOOK 2004C, PAGE 194.

in Bernalillo County, New Mexico (the "Property").

Pursuant to City ordinances, regulations and other applicable laws, the Owner is required to construct and maintain certain drainage facilities on the Property, and the parties wish to enter into this Covenant to establish the obligations and responsibilities of the parties.

- 2. <u>Description and Construction of Drainage Facility.</u> The Owner shall construct the following "Drainage Facility" within the Property and the adjoining Lot 1D at the Owner's sole expense and with the approval of the owner of Lot 1D (as evidenced by that certain letter dated 7/5/07 from the owner of Lot 1D to the City) in accordance with the standards, plans and specifications approved by the City: construction of an 18" RCP storm sewer pipe approximately 230 linear feet with rundown, headwall, and sidewalk culverts (as more particularly shown on Sheet 1 of Owner's Grading and Drainage Plan). The Drainage Facility is more particularly described in Exhibit A attached hereto and made a part hereof.
- 3. <u>Maintenance of Drainage Facility.</u> The Owner shall maintain the Drainage Facility at the Owner's sole cost in accordance with the approved Drainage Report and plans.
- 4. <u>Benefit to Property.</u> The Owner acknowledges and understands that the Drainage Facility required herein to be constructed is for the private benefit and protection of the Owner's

Property and that failure to maintain such facility could result in damage or loss to the Property.

- 5. <u>Inspection of Drainage Facility.</u> The City shall have no duty or obligation whatsoever to perform any inspection, maintenance or repair of the Drainage Facility, it being the duty of the Owner, its heirs, successors and assigns to construct and maintain the facility in accordance with approved plans and specifications.
- 6. <u>Liability of City.</u> The Owner understands and agrees that the City shall not be liable to the Owner, its heirs, successors or assigns, or to any third parties for any damages resulting from the Owner's failure to construct, maintain or repair the Drainage Facility.
- Indemnification. The Owner owns and controls the Drainage Facility and shall not permit the Drainage Facility to constitute a hazard to the health or safety of the general public. The Owner agrees to indemnify, defend and hold harmless the City, its officials, agents and employees, from any claims, actions, suits or other proceedings arising from or out of the negligent acts or omissions of the Owner, its agents, representatives, contractors or subcontractors or arising from the failure of the Owner, its agents, representatives, contractor or subcontractors to perform any act or duty required of the Owner herein; provided, however, to the extent, if at all, Section 56-7-1 NMSA 1978 is applicable to this Agreement, this Agreement to indemnify will not extend to liability, claims, damages, losses or expenses, including attorney's fees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by the respective indemnitee; or (2) the giving of or the failure to give direction or instructions by the respective indemnitee, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.
- 8. <u>Assessment. Nothing in this Covenant shall be construed to relieve the Owner, its heirs, assigns and successors from an assessment against the Owner's Property for improvements to the Property under a duly authorized and approved Special Assessment District. The parties specifically agree that the value of the Drainage Facility will not reduce the amount assessed by the City.</u>
- 9. <u>Binding on Owner's Property.</u> The covenants and obligations of the Owner set forth herein shall be binding on the Owner, its heirs, assigns and successors and on the Owner's Property and constitute covenants running with the Owner's Property until released by the City. This Covenant can only be released by the City's Chief Administrative Officer with the concurrence of the City Engineer.
- 10. Entire Covenant. This Covenant contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.
- 11. <u>Changes to Covenant.</u> Changes to this Covenant are not binding unless made in writing, signed by both parties.

OWNER:	Walgreen Co. an Illinois corporation By: Name: Posto M. Silver MAU Its: Divisional VILE PRESIDENT
OWNER'S ACKNOWLEDGME	NT
STATE OF NEW MEXICO	
COUNTY OF BERNALILLO)SS.)
	was acknowledged before me on <u>JULY 16</u> , 2007 by , DENESSONAL YELF PRESENT. Co., an Illinois corporation.
	Q'QaQT. QQ
	Notary Public
My Commission Expires:	"OFFICIAL SEAL" RICHARD F SCHMIDT NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 3/3/2011
rpd4\pfdrain1.cOv (Revised by Legal 8/97)	

Effective Date of Covenant. This Covenant shall be effective as of the date of

signature of the Owner

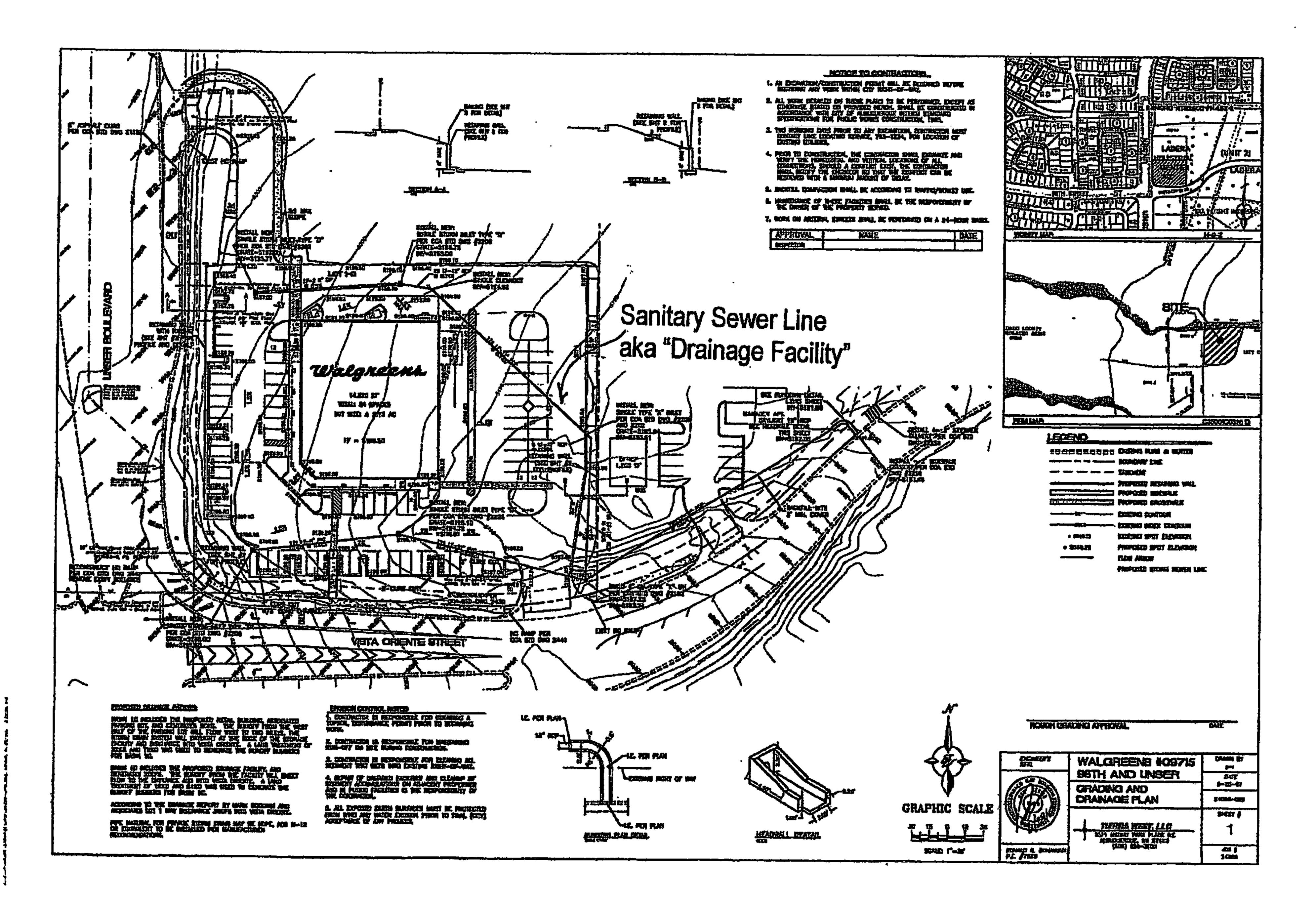
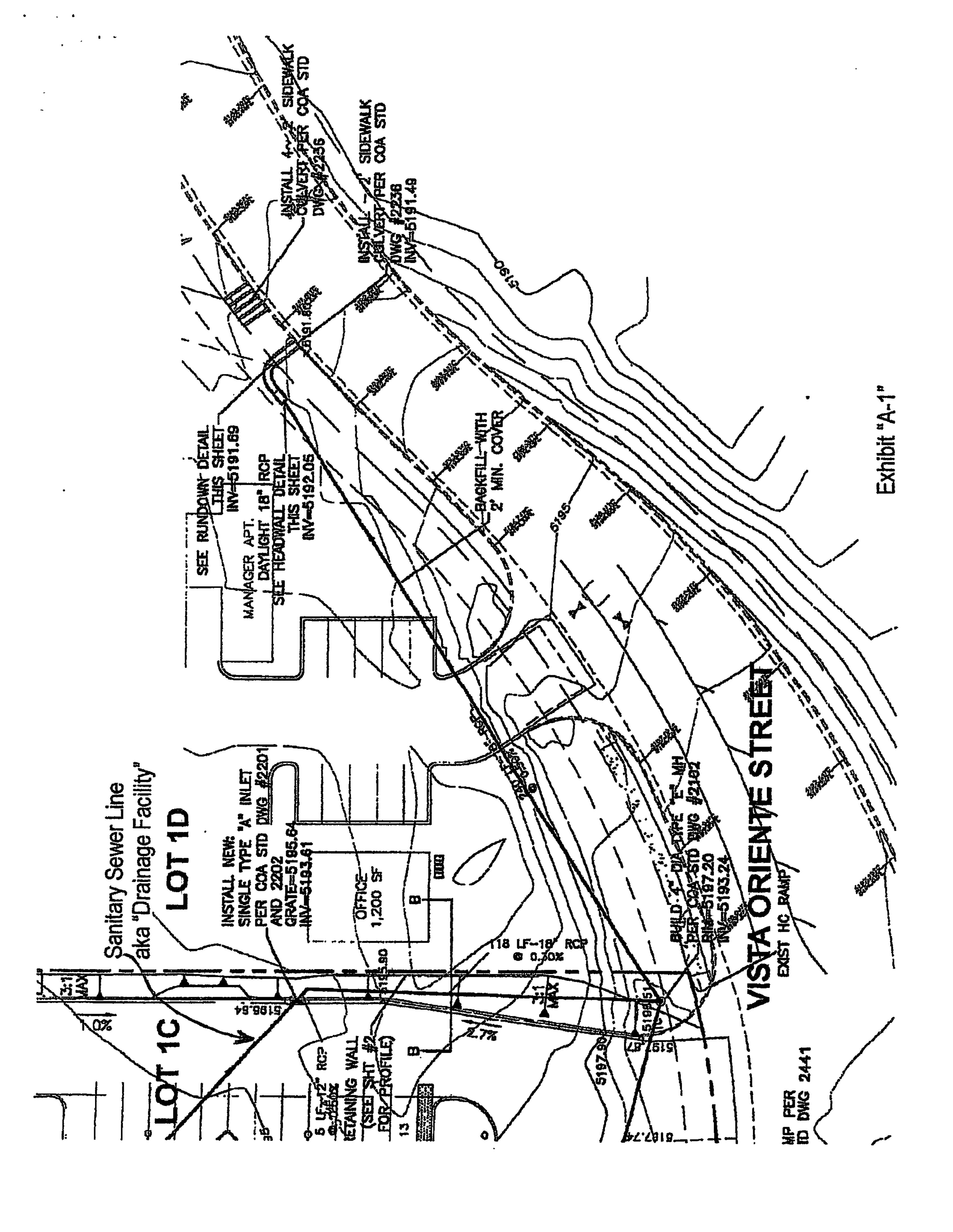


Exhibit "A"



CITY OF ALBUQUERQUE



July 12, 2007

Ronald Ray Bohannan, P.E. Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM 87109

Re: Walgreen's #09715 98th and Unser Grading and Drainage Plan Engineer's Stamp dated 6-29-07 (H10/D6A2)

Dear Mr. Bohannan,

Based upon the information provided in your submittal received 7-11-07, the above referenced plan is approved for Building Permit and SO19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

A separate permit is required for construction within City R/W. A copy of this approval letter must be on hand when applying for the excavation permit.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. You are required to send a copy of your SWPPP on a CD to the following address:

Department of Municipal Development Storm Drainage Division P.O. Box 1293, One Civic Plaza, Rm. 301 Albuquerque, NM 87103

If you have any question concerning the SWPPP, please contact Kathy Verhage 768-3654.

Also, prior to Certificate of Occupancy release:

- This office must have a copy of the private maintenance agreement and a copy of the letter granting permission to build on Lot 1B.
- Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3695.

Curtis A. Cherne, P.E.

Sincerely,

Engineering Associate, Planning Dept.

Development and Building Services

C: file
Antoinette Baldonado, Excavation and Barricading
Duane Schmitz, Street/Storm Drain Maintenance

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Monquerque - Making History 1706-2006

DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)



PROJECT TITLE:	Walgreens @ Ladera Industrial Park		DRG. FILE # H-10/D6A1
DRB : 1002404	EPC #: <u>03EPC-01211</u>	WORK ORD	ER #:
	V LOT 1C OF LADERA INDUSTRIAL PARK	DAY DOAD NIM A	ND VICTA ODIENTE CTREET MM
CITY ADDRESS:	UNSER BOULEVARD NW BETWEEN OLD OUR	RAY HUAD NW A	MD A12 I W OUIEMIE 2 I UEET 14 AA
ENGINEEDING EIDM	TIEDDA WECT IIC	CONTACT:	JOEL HERNANDEZ
ENGINEERING FIRM ADDRESS:	5571 MIDWAY PARK PLACE NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87109
OILI, OIAIL.	ALDOGOLIIGOL, IVIII		
OWNER:	CAP, II - C/O GEORGE RAINHART ARCHITECTS	CONTACT:	JON STERN
ADDRESS:	2325 SAN PEDRO NE, SUITE 2-B	PHONE:	(505) 884-9110 Ext. 110
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87110
ARCHITECT:	GEORGE RAINHART ARCHITECTS & ASSOCIATES	CONTACT:	JON STERN
ADDRESS:	2325 SAN PEDRO NE, SUITE 2-B	PHONE:	(505) 884-9110 Ext. 110
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87110
SURVEYOR:	SURV-TEK, INC	CONTACT:	RUSS HUGG
ADDRESS:	9384 VALLEY VIEW DRIVE	PHONE:	(505) 897-3366
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87114
CONTRACTOR:		CONTACT:	· · · · · · · · · · · · · · · · · · ·
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	· · · · · · · · · · · · · · · · · · ·
CHECK TYPE OF SUB	MITTAI ·	CHECK TYPE OF	APPROVAL SOUGHT:
DRAINAGE RE			NACIAL GUARANTEE RELEASE
	AN 1st SUBMITTAL, REQUIRES TCL or equal	PRELIMINA	ARY PLAT APPROVAL
	LAN RESUBMITTAL		AN FOR SUB'D. APPROVAL
CONCEPTUAL	. GRADING & DRAINAGE PLAN		AN FOR BLDG. PERMIT APPROVAL
X GRADING PLA	N .		LAN APPROVAL
EROSION CO	-		T APPROVAL
	CERTIFICATION (HYDROLOGY)		ON PERMIT APPROVAL
CLOMR/LOMR	·		PERMIT APPROVAL
	CULATION LAYOUT (TCL)		TE OF OCCUPANCY (PERM.) TE OF OCCUPANCY (TEMP.)
	ERTIFICATION (TCL)		PERMIT APPROVAL
	CERTIFICATION (DRB APPR. SITE PLAN) Comment response letter		ERMIT APPROVAL
X OTHER	Comment response letter		DER APPROVAL
		SO-19	
WAS A PRE-DESIGN (CONFERENCE ATTENDED:		
YES			
X NO			
COPY PROVID	DED		JUL 1 1 2007
DATE SUBMITTED:	7/11/2007	BY: JOEL HERN	ANDEZ, PE

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

- 1. Conceptual Grading and Drainage Plans: 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

5571 Midway Park Place NE Albuquerque, NM 87109

(505) 858-3100 fax (505) 858-1118 twllc@tierrawestllc.com 1-800-245-3102

July 9, 2007

Mr. Curtis A. Cherne, P.E. Engineering Associate
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

RE: Drainage Plan Approval

Walgreens at Ladera Industrial Park (H10/D6A2)

Dear Mr. Cheme:

Tierra West, LLC, in response to the comment letter dated June 26, 2007, hereby submits for your review and approval a revised grading and drainage plan and accompanying pipe flow calculations.

We respectfully submit the following responses to the individual comments:

The rundown on the southeast corner of Lot 1D must be sized to convey the runoff from Lots 1B, 1C, and 1D. Provide build notes and calculations.

Response: Rundowns were added on the southeast corner of Lot 1D and were sized to convey the runoff from Lots 1B, 1C, and 1D. Calculations are attached and build notes/detail were added to the plan.

The proposed storm drain across lot 1D is not in the easement along the frontage.

Response: A blanket easement exists over Lots 1B, 1C and 1D that allows for the installation and maintenance of drainage facilities.

Is the type "E" inlet (grate 5198.00) supposed to be a Type "D"?

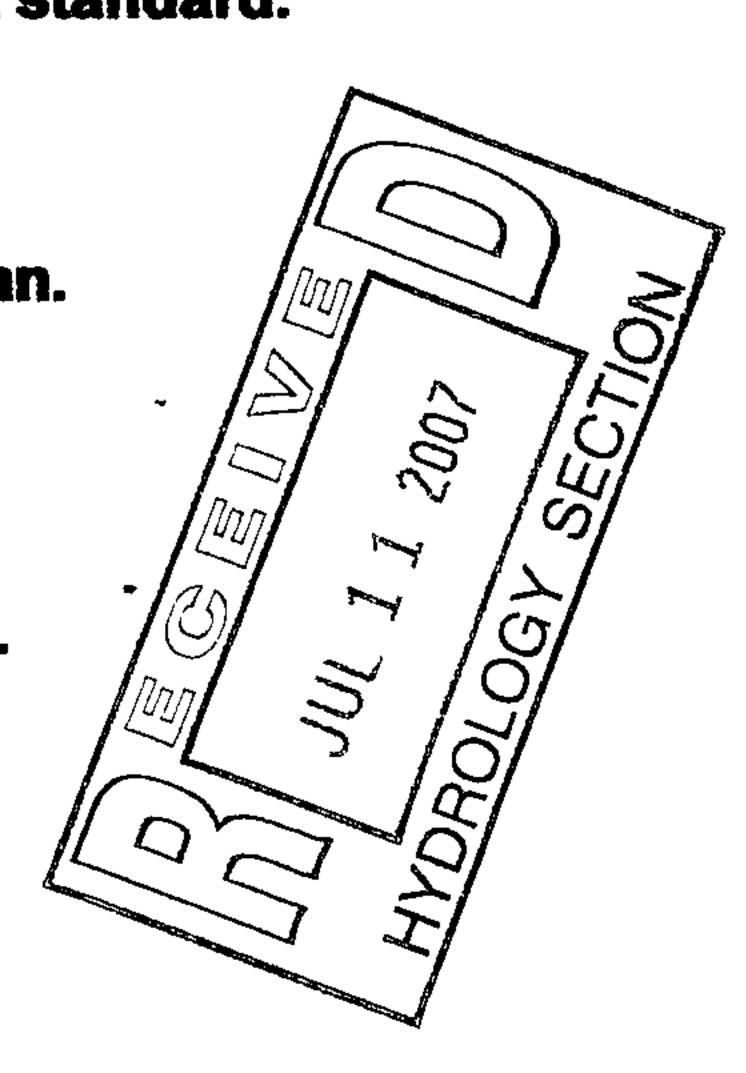
Response: Inlet designations were updated to the appropriate COA standard.

Show both 8" DIP (P-4) lines on the plan.

Response: Both 8-inch DIP lines are depicted graphically on the plan.

You reference SDR35 for DIP and RCP. It is a plastic pipe specification.

Response: Pipe specifications were updated for each material type.



Owners of Lot 1C will be responsible for maintenance of the storm drain piping on Lot 1D. A maintenance agreement stating so is required.

Response: The standard private maintenance agreement was forwarded to the property owner/developer for execution. We request this item be a condition of certificate of occupancy.

I would recommend DIP or RCP IV for Pipe P-3 since there is only 1 foot of cover.

Response: The material for pipe P-3 was revised to RCP.

This plan shows construction activities on lot 1B, which is owned by a different party than lot 1C. Their permission is required.

Response: Lot 1B is under the developer's ownership. A letter of permission will be forwarded by separate cover.

Type "D" inlets are per COA STD DWG 2206, not 2202.

Response: The inlet designations were updated to the appropriate COA standard (2206).

The drainage report specifies that a curb cut will be located east of the retail building to pass offsite flows from Basin 1B. Then this runoff will continue in a concrete rundown into the storage center entrance. Where is the curb cut? How much of the 7.6 cfs will enter inlets I-1, I-2 and I-3?

Response: The curb cut specified in the drainage report will be constructed when Lot 1B develops. The interim graded condition maintains a similar historical drainage pattern across Lot 1B, where none of the Lot 1B drainage enters the inlets on Lot 1C.

If you have any questions, or require any additional information, please do not hesitate to contact our office.

Sincerely,

Ronald R. Bohannan, P.E.

Enclosures

JN: 24086 RRB/JH/bm

24086:7-9-07-Curtis Cheme, Hydrology.doc

FHWA Urban Drainage Design Program, HY-22 HYDRAULIC PARAMETERS OF OPEN CHANNELS

Trapezoidal, Rectangular, or Triangular X-Section Date: 06/29/2007

Project No. :24086

Project Name.: Walgreens at Unser and Vista Oriente

Computed by :Joel Hernandez

INPUT PARAMETERS

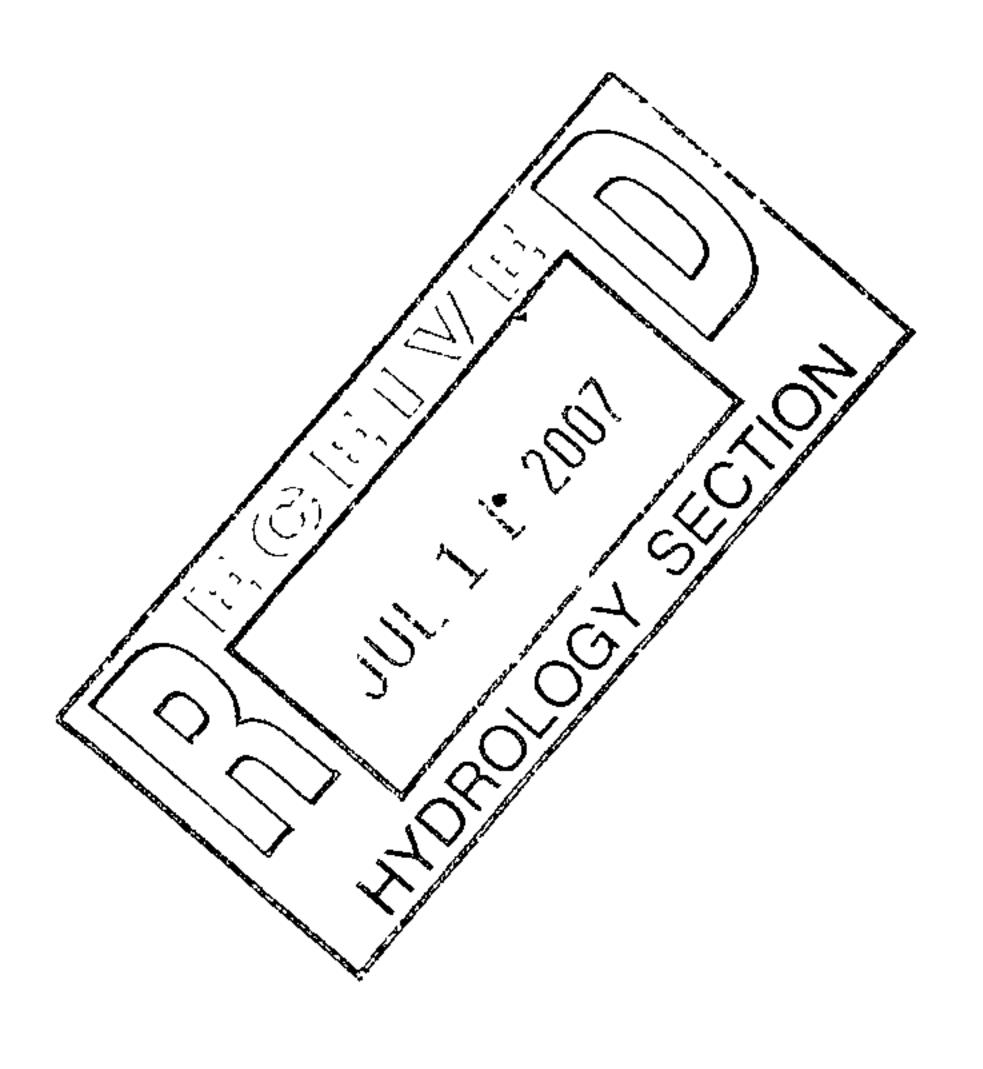
1. Channel Slope (ft/ft)	0.0200
2. Channel Bottom Width (ft)	2.00
3. Left Side Slope (Horizontal to 1)	0.00
4. Right Side Slope (Horizontal to 1)	0.00
5. Manning's Coefficient	0.013
6. Discharge (cfs)	7.77 => CAPACITY OF
7. Depth of Flow (ft)	0.50 Z-FT SIDELLALK
	CULVERT PER
	COA STD #2236
OUTPUT RESULTS	COM -17 77-200
Cross Section Area (Sqft)	1.00
Average Velocity (ft/sec)	7.77
Top Width (ft)	2.00
Hydraulic Radius (ft)	0.33
Froude Number	1.94
troade Namber	$\mathcal{L} \bullet \mathcal{J} \mathcal{L}$

GIVEH:

DISCHARGE FOR LOTS 18+1C+1D => Q= 36 C+S

Q/5=7.2 C+S 4 QGARACTY = 7.77 C+S

.. CONSTRUCT 512' CULVERTS

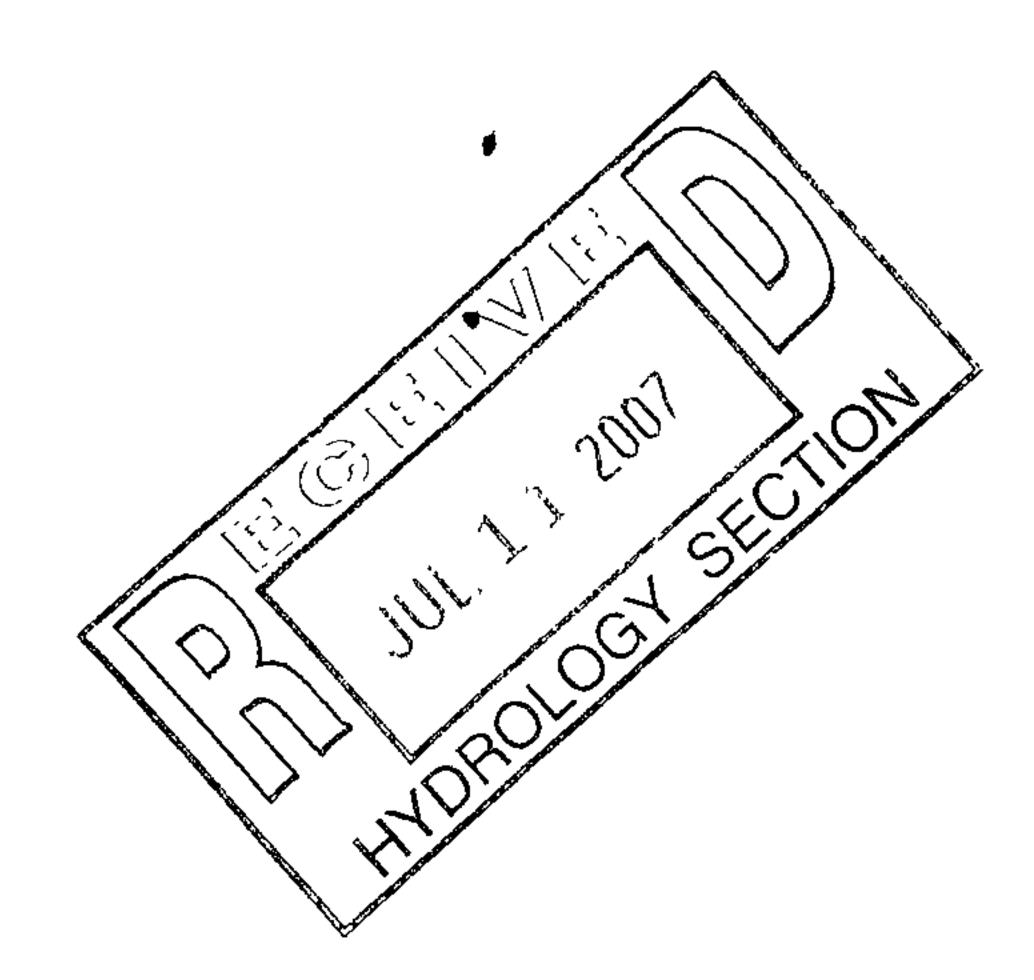


FHWA Urban Drainage Design Program, HY-22 HYDRAULIC PARAMETERS OF OPEN CHANNELS

Trapezoidal, Rectangular, or Triangular X-Section Date: 06/29/2007

Project No. :24086
Project Name.:Walgreens
Computed by :J Hernandez

INPUT PARAMETERS	CHECK RUHPOWH C. OUTLET:
1. Channel Slope (ft/ft)	0.0178
2. Channel Bottom Width (ft)	2.00
3. Left Side Slope (Horizontal to 1)	0.00
4. Right Side Slope (Horizontal to 1)	0.00
5. Manning's Coefficient	0.013
6. Discharge (cfs)	7.33 = DISCHARGE FROM
7. Depth of Flow (ft)	0.50, PIPE OUTLET
OUTPUT RESULTS	SUMBORTH H=1.0,
Cross Section Area (Sqft)	1.00
Average Velocity (ft/sec)	7.33
Top Width (ft)	2.00
Hydraulic Radius (ft)	0.33
Froude Number	1.83





July 11, 2007

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

RE:

LOTS 1-B and 1-D OF SUBDIVISION PLAT OF LOTS 1-A, 1-B, 1-C AND 1-D, LADERA INDUSTRIAL CENTER, BEING A REPLAT OF LOT 1 LADERA INDUSTRIAL CENTER SITUATE WITHIN THE TOWN OF ATRISCO GRANT PROJECTED SECTION 9, T.10N.R.2.E., N.M.P.M., CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE REPLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JUNE 24, 2004 IN PLAT BOOK 2004C, PAGE 194.

Dear Sir(s):

Peterson INV – 98TH/Unser, LLC, landowner of the above-referenced property, hereby grants to Walgreen Co., an Illinois corporation ("Walgreens") access to Lot 1-B and Lot 1-D for purposes of construction and maintenance of that certain Drainage Facility as shown on the attached Exhibit "A". Specifically, we grant access with the knowledge that Walgreens will be constructing the Drainage Facility on Tract 1-C but will require access to Lot 1-B for construction of a temporary access drive and related improvements and that the Drainage Facility will cross Lot 1-D as shown on Exhibit "A".

Thank you for your time and attention hereto.

Very Truly Yours,

Peterson INV – 98th/Unser, LLC A New Mexico limited liability company

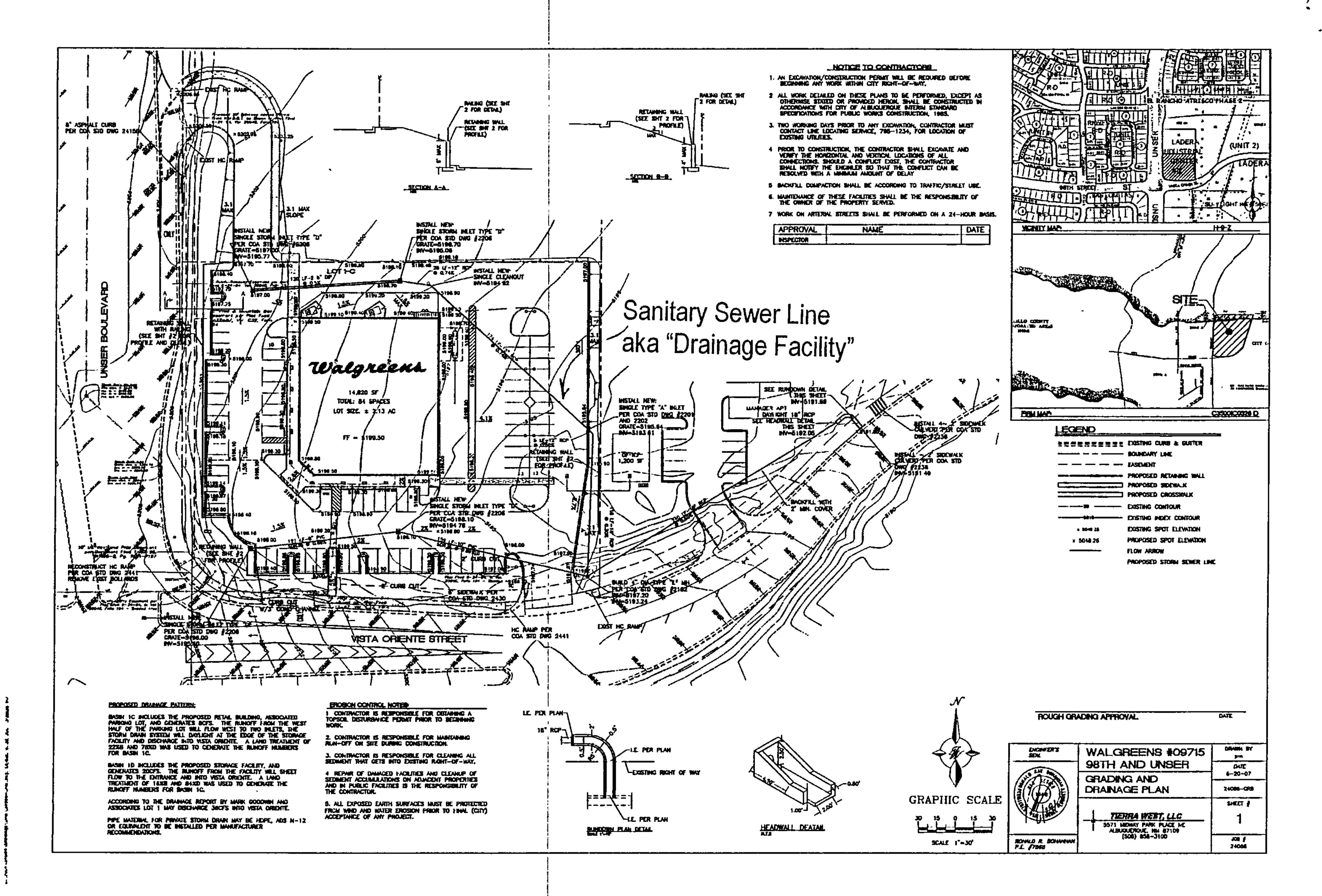
By: Peterson Properties Investments, LLC

Its Managing Member

By: The James A. Peterson and Mary B.

Peterson Revocable Trust (dated 08-18-98)

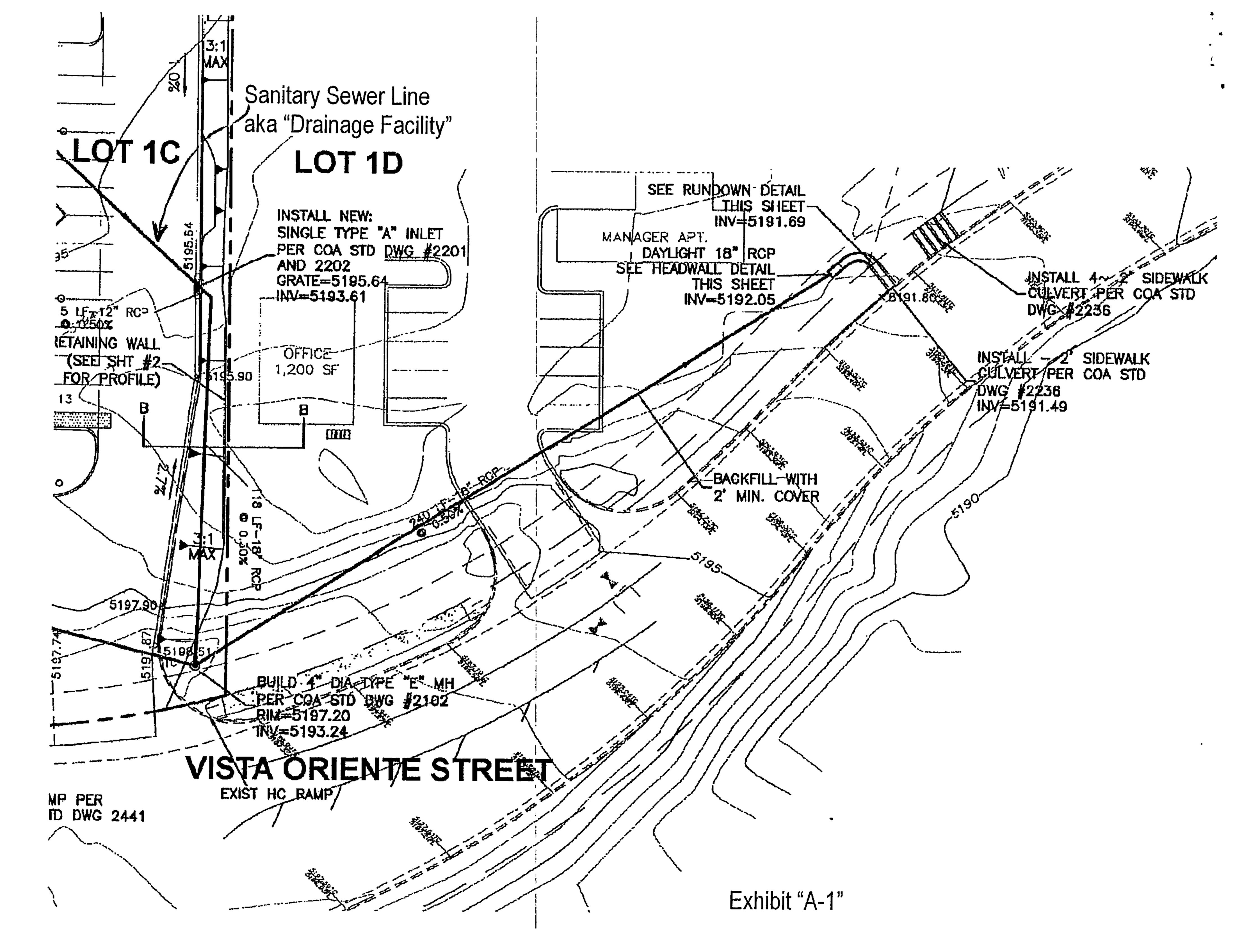
James A. Peterson, Trustee



86366 288669 (87669)

.

•



CITY OF ALBUQUERQUE



February 29, 2008

Ronald Ray Bohannan, P.E. **Tierra West, LLC.**5571 Midway Park Place N.E. Albuquerque, NM 87109

Re: Walgreen's @ Ladera Industrial Park, 2200 Unser NW,

Request of Permanent Certificate of Occupancy (C.O.)

Engineer's Stamp dated 10/16/06 (H-10/D006A2)

Certification dated 2/25/08

Based upon the information provided in your submittal received 2/28/08, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

P.O. Box 1293

If you have any questions, you can contact me at 924-3982.

Albuquerque

New Mexico 87103

Timothy Sims

Sificerely,/

Plan Checker, Hydrology

Development and Building Services

www.cabq.gov

CO Clerk—Katrina Sigala

File H-10/D006A2

DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)

	Malaus as a Galas de la desatrial Darle	ZONIE NAND/	H-10/D 00 6AZ. DRG. FILE #-H-10/D6A1
PROJECT TITLE: DRB ; 1002404	Walgreens @ Ladera Industrial Park EPC #:	WORK ORD	
DND 1 1002404			
LEGAL DESCRIPTION	LOT 1C OF LADERA INDUSTRIAL PARK		
CITY ADDRESS:	UNSER BOULEVARD NW BETWEEN OLD OU	RAY ROAD NW A	ND VISTA ORIENTE STREET NW
ENGINEERING FIRM:	TIERRA WEST, LLC		JOEL HERNANDEZ
ADDRESS:	5571 MIDWAY PARK PLACE NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87109
OWNER:	98TH /CENTRAL LLC	CONTACT:	DOUG PETERSON
ADDRESS:	2325 SAN PEDRO NE	PHONE:	505-884-3578
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87110
ARCHITECT:	GEORGE RAINHART ARCHITECTS & ASSOCIATES		
ADDRESS:	2325 SAN PEDRO NE, SUITE 2-B	PHONE:	(505) 884-9110 Ext. 110
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	<u>87110</u>
SURVEYOR:	WALKER SURVEYING	CONTACT	STEVE WALKER
ADDRESS:	424 SHIRK SW	PHONE:	505-877-8783
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87105
CONTRACTOR:	WILGER ENTERPRISES	CONTACT:	ROBERT
ADDRESS:	425 EDMON ROAD NE	PHONE:	505-345-2584
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	<u>87107</u>
DRAINAGE PLAN CONCEPTUAL GRADING PLAN EROSION CON X ENGINEER'S CONCEPTUAL CRADING PLAN EROSION CON TRAFFIC CIRC ENGINEERS CONCEPTUAL	PORT AN 1st SUBMITTAL, <i>REQUIRES TCL or equal</i> LAN RESUBMITTAL GRADING & DRAINAGE PLAN	SIA / FINAN PRELIMINA S. DEV. PL S. DEV. PL SECTOR P FINAL PLA FOUNDATI BUILDING X CERTIFICA GRADING	APPROVAL SOUGHT: NACIAL GUARANTEE RELEASE ARY PLAT APPROVAL AN FOR SUB'D. APPROVAL AN FOR BLDG. PERMIT APPROVAL LAN APPROVAL ON PERMIT APPROVAL PERMIT APPROVAL ATE OF OCCUPANCY (PERM.) ATE OF OCCUPANCY (TEMP.) PERMIT APPROVAL ERMIT APPROVAL ERMIT APPROVAL DER TECTOR
YES X NO	ONFERENCE ATTENDED:		FEB 2 8 2008
COPY PROVID	EU		HYDROLOGY SECTION

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

2/25/2008

DATE SUBMITTED:

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

BY: JOEL HERNANDEZ, PE

- 2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
- 3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

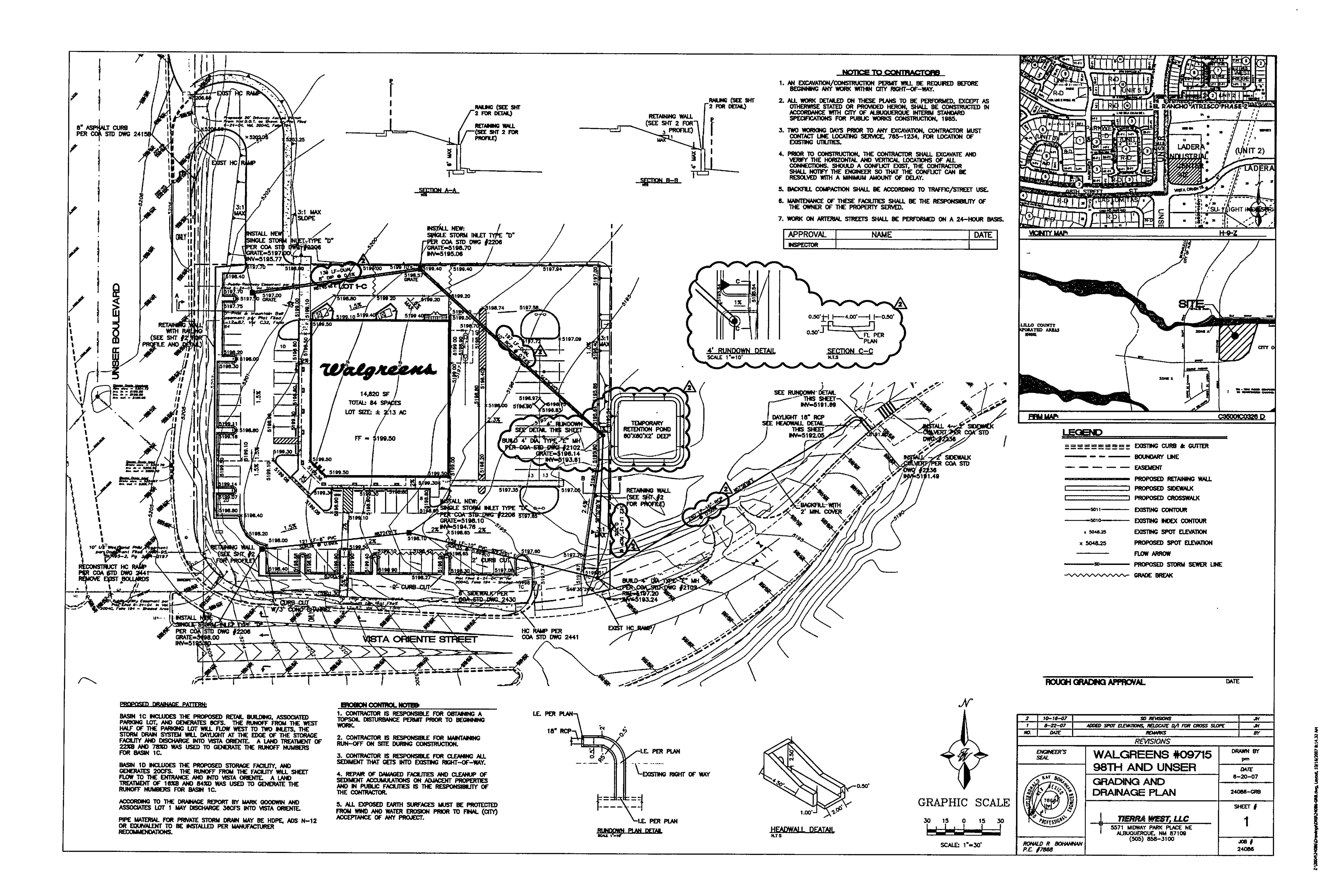
DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE:	Walgreens @ Ladera Industrial Park	ZONE MAP	DRG. FILE #: H-10/D6A1
DRB 3 1002404	EPC #: <u>03EPC-01211</u>	WORK ORE)ER #:
LEGAL DESCRIPTION	LOT 1C OF LADERA INDUSTRIAL PARK		
CITY ADDRESS:	UNSER BOULEVARD NW BETWEEN OLD O	IDAY DOAD NIM A	ND VICTA ODIENTE CTOCCT NUM
011 1 7 LD D1 (LOO.	CHOCK DOCKERNING HAS DETAILED OF O	UNAT KUAD NY A	ND VISTA ORIENTE STREET NW
ENGINEERING FIRM:	TIERRA WEST, LLC	CONTACT:	JOEL HERNANDEZ
ADDRESS:	5571 MIDWAY PARK PLACE NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87109
OWNER:	CAP, II - C/O GEORGE RAINHART ARCHITECTS	CONTACT:	JON STERN
ADDRESS:	2325 SAN PEDRO NE, SUITE 2-B	_ PHONE:	(505) 884-9110 Ext. 110
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87110
ARCHITECT:	GEORGE RAINHART ARCHITECTS & ASSOCIATE	S CONTACT:	JON STERN
ADDRESS:	2325 SAN PEDRO NE, SUITE 2-B	PHONE:	(505) 884-9110 Ext. 110
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87110
SURVEYOR:	SURV-TEK, INC	CONTACT:	RUSS HUGG
ADDRESS:	9384 VALLEY VIEW DRIVE	PHONE:	(505) 897-3366
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87114
001201000			
CONTRACTOR:		_ CONTACT:	
ADDRESS: CITY, STATE:		PHONE:	
OHI, OIAIL.		_ ZIP CODE:	
CHECK TYPE OF SUBM	ITTAL:	CHECK TYPE OF	APPROVAL SOUGHT:
DRAINAGE REP			ACIAL GUARANTEE RELEASE
	N 1st SUBMITTAL, REQUIRES TCL or equal	**************************************	RY PLAT APPROVAL
	AN RESUBMITTAL	S. DEV. PL	AN FOR SUB'D. APPROVAL
	GRADING & DRAINAGE PLAN		AN FOR BLDG. PERMIT APPROVAL
X GRADING PLAN			LAN APPROVAL
EROSION CONT	ERTIFICATION (HYDROLOGY)		CALDED AND DOOL (ALL
CLOMR/LOMR			ON PERMIT APPROVAL PERMIT APPROVAL
	JLATION LAYOUT (TCL)		TE OF OCCUPANCY (PERM.)
	RTIFICATION (TCL)		TE OF OCCUPANCY (TEMP.)
ENGINEERS CE	RTIFICATION (DRB APPR. SITE PLAN)		PERMIT APPROVAL
X OTHER	Construction Change	PAVING PE	RMIT APPROVAL
		WORK ORE	DER APPROVAL
		SO-19	
WAS A PRE-DESIGN CO	NFERENCE ATTENDED:		
YES	MI LINEINCE ATTENDED.		
X NO			
COPY PROVIDE	D		
	•		
DATE CHIBBANTEE	40/4F/0007		
DATE SUBMITTED:	10/15/2007	BY: JOEL HERNA	NDEZ, REI OPT 1 R 2007
Requests for approvale of	Site Development Blanc and/a- Cubalistics - Dur		INDER OF COME SECTION
particular nature, location	Site Development Plans and/or Subdivision Plat and scope of the proposed development defines	s snall be accompared the decree of drains	age detail. One or more of the following

- 1. Conceptual Grading and Drainage Plans: 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

levels of sumbittal may be required based on the following:



Title: FlexTable: Conduit Table (24086-alt 2.stc)

Current Time: 0.000 min

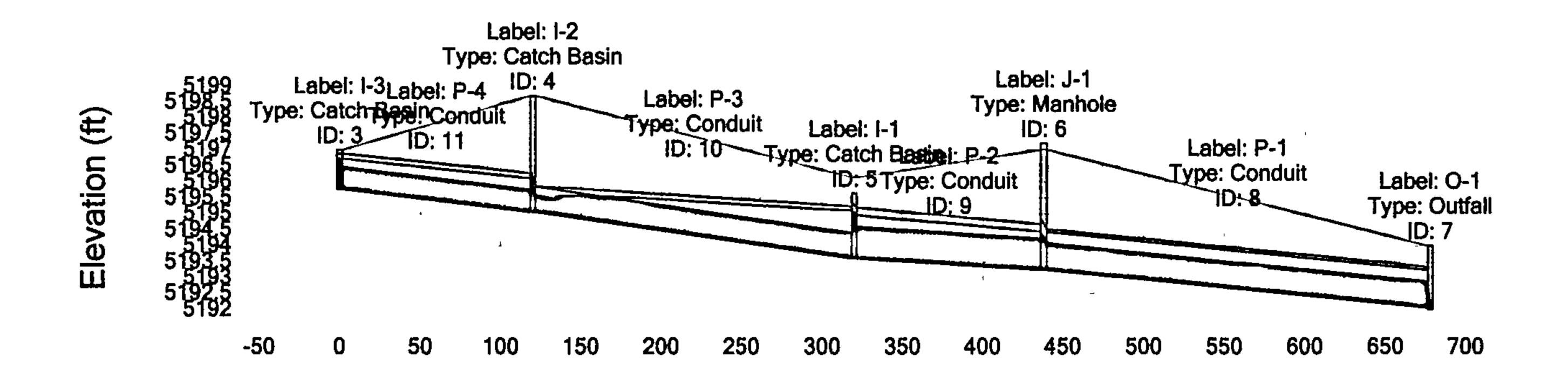
Label	Start Node	Invert (Upstream) (ft)	Stop Node	Inve (Downst (ft	tream)		Conduit 9	Shape	Material	Manning's n	Diameter (in)
P-1	J-1	5,193.24	0-1	5,	,192.05	Circul	lar Pipe		PVC	0.010	15.0
P-2	I-1	5,193.61	J-1	5,	,193.24	Circul	lar Pipe		PVC	0.010	12.0
P-3	I-2	5,195.06	I-1	5,	,193.61	Circui	lar Pipe		PVC	0.010	10.0
P-4	I-3	5,195.77	' I-2	5,	,195.06	Circul	lar Pipe		PVC	0.010	8.0
P-5	I-4	5,194.76	J-1	5,	,193.24	Circui	lar Pipe		PVC	0.010	10.0
P-6	I-5	5,195.60	I-4	5,	,194.76	Circul	lar Pipe		PVC	0.010	8.0
Number Barrels		Flow ft³/s)	Length (ft) (C	Slope alculated) (ft/ft)	Capac (Full Fid (ft³/s	ow)	Elevation Ground (Start) (ft)	Elevation Ground (Stop) (ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Velocity (Average) (ft/s)
	1	4.69	240.0	0.005	5	5.91	5,197.00	5,194.00	5,194.12	5,192.89	5.22
	1	3.07	118.0	0.003] 2	2.59	5,196.14	5,197.00	5,194.96	5,194.44	3.91
	2	3.07	200.0	0.007	4	1.85	5,198.70	5,196.14	5,195.62	5,195.10	3.39
	2	2.23	120.0	0.006	2	2.42	5,197.00	5,198.70	5,196.72	5,196.12	3.19
	1	1.62	159.0	0.010	2	2.78	5,198.10	5,197.00	5,195.33	5,194.44	3.52
	1	1.11	121.0	0.007	1	1.31	5,198.00	5,198.10	5,196.10	5,195.46	3.57

Title: 24086-alt 2.stc

24086-alt 2.stc

Title: Profile Report Profile: Profile - 1

Profile - 1 - Alternate-equivalent pipes



Station (ft)

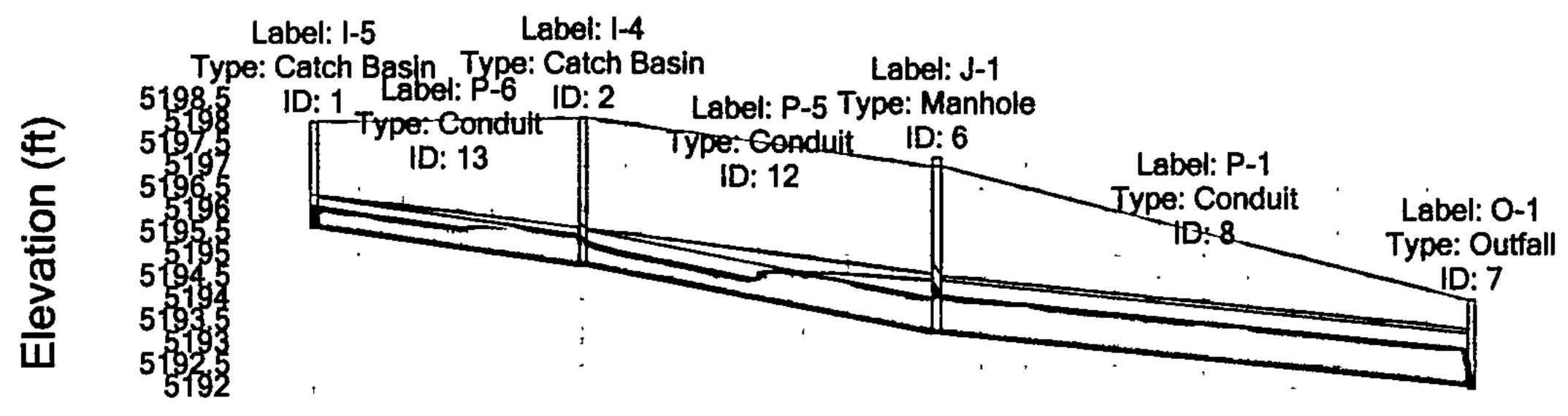
Ground (ft) 5 Invert (ft) 519	11\P-4 116 7 0.7\PVC 2 23 0 006 \1-3 197 5198 7 5195 06 0	10 \ P-3 196.7 0 8 \ PVC 3 07 0 007	9\P-2 114.4 1\PVC 3 07 0 003 5\I-1 5196.14 5193.61 320	6\J-1 5197 5193 24 438	8 \ P-1 236 5 1 2 \ PVC 4 69 0 005	7 \ O-1 5194 5192 678
----------------------------------	--	---	--	---------------------------------	--	--------------------------------

Title: 24086-alt 2.stc

24086-alt 2.stc

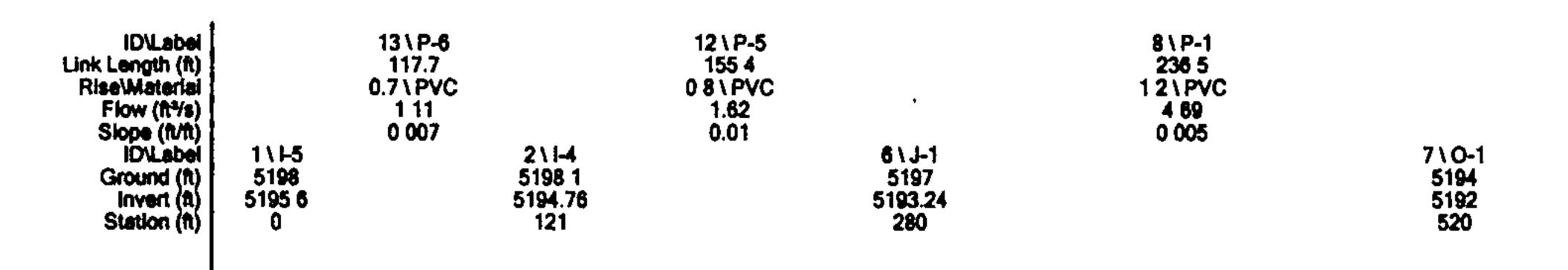
Title: Profile Report Profile: Profile - 2

Profile - 2 - Alternate-equivalent pipes



-20 0 20 40 60 80 100120140160180200220240260280300320340360380400420440460480500520540

Station (ft)



Title: 24086-alt 2.stc

24086-alt 2.stc

Haestad Methods Solution Center 27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA 10/15/2007 +1-203-755-1666

Project Engineer: Joel Bentley StormCAD V8 XM Edition [08.09.081.00] Page 1 of 1

Worksheet for Rundown (4-ft) replacing Inlet I-1

Project Description		
Friction Method	Manning Formula	
Solve For	Normal Depth	
Input Data		
Roughness Coefficient	0.013	
Channel Slope	0.01000	ft/ft
Bottom Width	4.00	ft
Discharge	2.64	ft³/s (Q ₁₀₀)
Results		
Normal Depth	2.25	in 4 6 14 0K
Flow Area	0.75	ft²
Wetted Perimeter	4.37	ft
Top Width	4.00	ft
Critical Depth	0.24	ft
Critical Slope	0.00462	ft/ft
Velocity	3.52	ft/s
Velocity Head	0.19	ft
Specific Energy	0.38	ft
Froude Number .	1.44	
Flow Type	Supercritical	
GVF Input Data		
Downstream Depth	0.00	in
Length	0.00	ft
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.00	in
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	2.25	in
Critical Depth	0.24	ft
Channel Slope	0.01000	ft/ft
Critical Slope	0.00462	ft/ft

Weighted E Method

PETENTION BASIN SIZE:

Developed On-Site Basins

											100	-Year, 6-H	· .	10	-Year, 6-Hir	· 	2-	Year, 6-Hr		100-1	Year, 10-Day	y
Basin	Area	Area	Trea	tment A	Trea	itment 8	Treatr	nent C	Treat	tment D	Weighted E	Volume	Flow	Weighted E	Volume	Flow	Weighted E	Volume	Flow	Weighted E	Volume	Flow
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)		(ac-ft)	cfs		(ac-ft)	cfs		(ac-ft)	cfs		(ac-ft)	cfs
I-1	29,775	0.68	0%	0	22%	0 15	0%	0	78%	0 53	1.684	0.096	2.64	1.016	0.058	1.66	0.564	0 032	0.91	1.684	0.161	2 64
													 -									
Total	29,775						i					0.096	2 64			1.66					0.161	2 64

Equations for Weighted E Method:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume ≃ Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Volume (10-day) = V_{300} + Ad * (P_{10days} - P_{300})/ 12 ln/ft

Excess Precipitation, E (inches)								
Zone 1	100-Year	10 - Yea	2 - Year					
E,	0.44	0.08	0 00					
E,	0.67	0 22	0.01					
E.	0 99	0 44	0.12					
E۵	1.97	1.24	0.72					

Peak Discharge (cfs/acre)					
Zone 1	100-Year	10 - Yea	2 - Year		
a.	1.29	0.24	0		
đ	2.03	0.76	0.03		
Q	2.87	1 49	0.47		
Q _d	4 37	2.89	1 69		

· CONSTRUCT RETENTION BASIN (TEMPORARY)

SIZE: 60' X60' XZ' DEEP

= 0.165 AC-FT > D.161 AC-FT : OK (PROVIDED) (REQUIRED)

CITY OF ALBUQUERQUE



October 18, 2007

Ronald R. Bohannan, P.E. Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM 87109

Re: Walgreens @ Ladera Industrial Park Grading and Drainage Plan Engineer's Stamp dated 10-16-07 (H20-D06A2)

Dear Mr. Bohannan,

Based upon the information provided in your submittal received 10-16-07, the above referenced plan is approved as amended. This is now the plan that must be certified for Certificate of Occupancy release by Hydrology.

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

Sincerely,

Bradley L. Bingham, PE

Principal Engineer, Planning Dept.

Development and Building Services

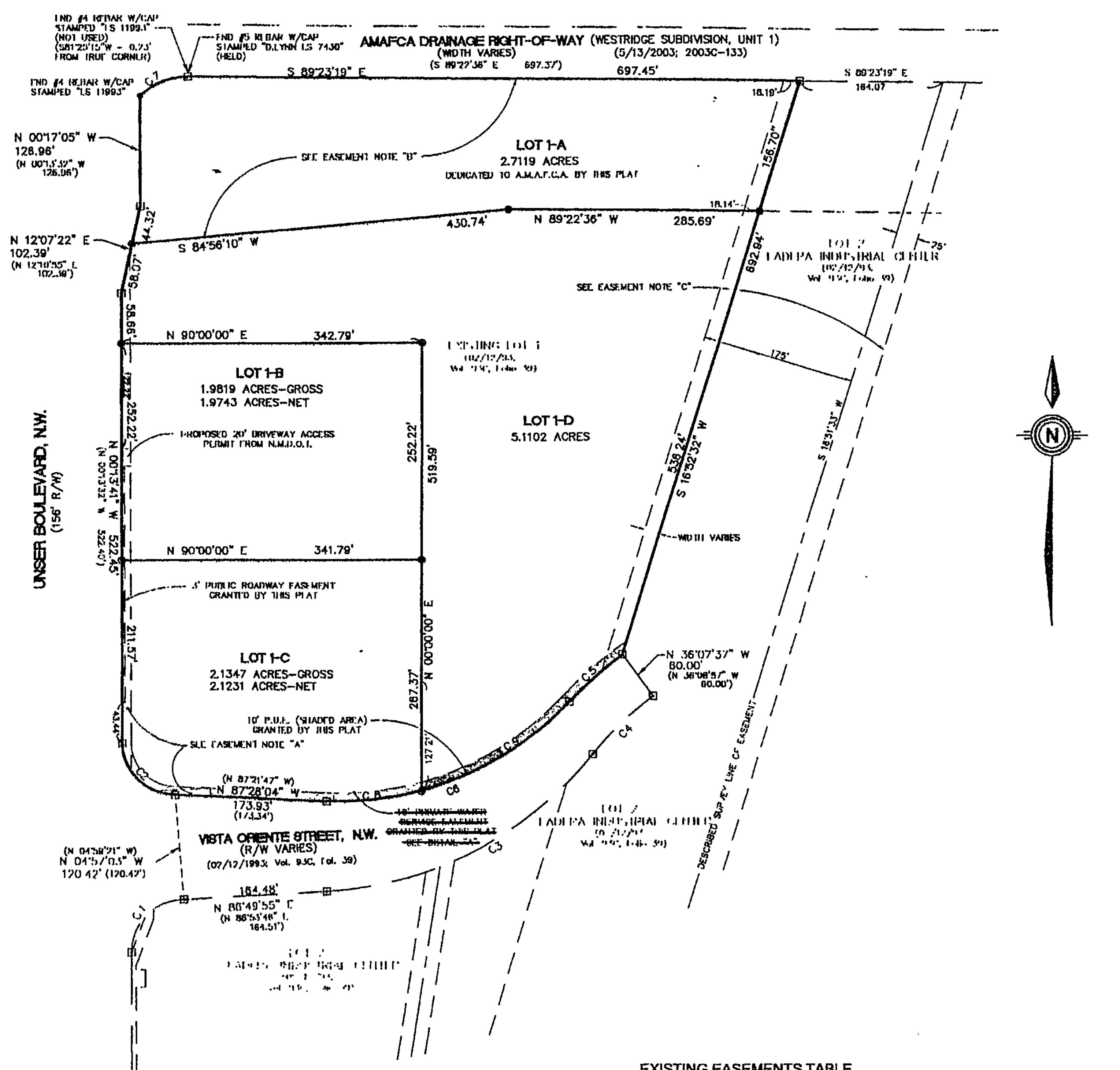
C: file

New Mexico 87103

P.O. Box 1293

Albuquerque

www.cabq.gov



SUBDIVISION PLAT OF

LOTS 1-A, 1-B, 1-C AND 1-D LADERA INDUSTRIAL CENTER

BEING A REPLAT OF LOT 1
LADERA INDUSTRIAL CENTER
SITUATE WITHIN THE TOWN OF ATRISCO GRANT
PROJECTED SECTION 9, T. 10 N., R. 2 E., N.M.P.M.
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
SEPTEMBER, 2003

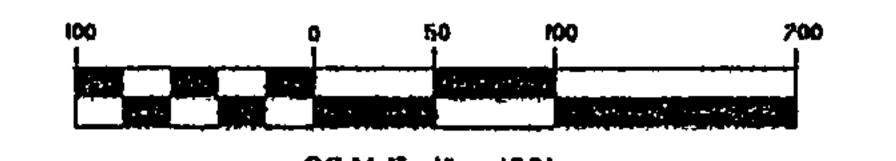
CROSS ACCESS EASEMENT

This plot hereby establishes a perpetual, non-exclusive, reciprocal easement for vehicular and pedastrian ingress to and egress from Unser Soulevard and Vista Oriente Street over, upon and across the Common Areas of both Lot 1—B and Lot 1—C for the benefit of the owners of each lot. "Common Areas shall mean all of those areas on each lot which are not from time to time, and at any applicable time, occupied by buildings. By way of Hustration, and not limitation, Common Area shall include all private streets, driveways, areas of ingress and egress, parking areas, service areas, sidewalks and other pedestrian ways, landscape areas and similar amenities designated and maintained for such uses from time to time. The Owner of each Lot shall have the right to change the Common Area at any time and from time to time, provided access as hereinafter granted is not adversely affected.

UTILITY EASEMENTS

This plot hereby establishes and grants for the benefit of each Lot and the Owners thereof and their successors and assigns and their Lessess a perpetual, non-exclusive, reciprocal underground easement across the Common Areas of each respective Lot as such are manintained by each lot owner from time to time, for the purpose of installing, maintaining, operating, repairing, replacing and renewing any and all underground utility lines and related facilities, including without limitation, electricity, water, gas, sewer, telephone, cable telvision and strom drains. All such easements, shall (if practical) be located along perimeters or boundary lines of the Property, but in any event shall be situated to as to minimize damage, diminutions in value or other negative impacts, upon the burdened Property or Common Areas.

- INDICATES A FOUND MONUMENT AS SHOWN HEREON
- INDICATES A FOUND #5 REBAR W/ORANCE PLASTIC CAP STAMPED "D. LYNN LS 7430"
- *CSC LS 12661" SET ON THIS SURVEY.
- A INDICATES A FOUND CONTROL STATION AS NOTED



		CUR	VE TABLE		
CURVE	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1 60.0	60.00	94,33'	90'04'27"	N 44'41'54" E	84.91
	(60.00')	(94.25')	(90000'00")	(N 44'46'28" [')	(84.85')
C2	60.00	94.25	80,00,00,	N 4513'41" W	84.85
	(60,00')	(94.25')	(90'00'00")	(N 4573'32" W)	(84,85')
C3	410.00	349.39	48'49'32"	N 62'30'02" E	338.91
	(410.00')	(349.48')	(48*50'18*')	(N 62"29"34" E)	(339,00')
C4	350.00	96.38	15'46'45"	N 45"58'35" E	96.09
	(350,00')	(96,38')	(15'45'37")	(N 45'57'44" E)	(96.07')
C5	410.00	81.53	11"23'42"	S 47'55'39" W	81,41
	(410.00')	(82,30')	(11"30"30")	(S 48'05'5/" W)	(82,16')
C6	350.00	307.20	5017'23"	S 67"29'08" W	297.44
	(350.00')	(307.19')	(50'17'14")	(S 67'29'37" W)	(297.42')
C7	75.00'	60,03	45'51'33"	N 67'52'23" E	58.44
	(75,00')	(59.97')	(45'48'48")	(N 6743'02" E)	(58.39)
C8	350,00	108,00	17'40'48"		107.57
C9	350.00	199,20	32'36'35"	S 58'38'44" W	



EXISTING EASEMENTS TABLE

- A. 10' EASEMENT (PORTIONS OF WHICH NOW LIE WITHIN PUBLIC RIGHTS—OF—WAY) GRANTED TO PUBLIC SERVICE COMPANY OF NEW MEXICO AND MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, GRANTED BY PLAT IN VOLUME C-32, PAGE 184.
- . EASEMENT GRANTED TO ALBUQUERQUE METROPOLITAN ARROYD FLOOD CONTROL AUTHORITY IN JUDGMENT RENDERED IN DISTRICT COURT CASE NO. 7—76—03096, FILED 09/28/1978 IN BOOK 498, PAGE 848, LESS AND EXCEPTING THEREFROM A VACATED PORTION, FILED 01/12/2000 IN BOOK A1, PAGE 3519.
- C. EXISTING 200' PLAINS ELECTRIC EASEMENT GRANTED PER JUDGMENT RENDERED IN UNITED STATES DISTRICT COURT CASE NO. 1845, FILED 02/05/1952 IN BOOK D 197, PAGE 571.

SHEET 2 OF 2

CITY OF ALBUQUERQUE



January 17, 2008

Ronald Ray Bohannan, P.E. Tierra West, LLC. 5571 Midway Park Place N.E. Albuquerque, NM 87109

Re: Walgreen's @ Ladera Industrial Park, Lot 1C of Ladera Industrial Park,

Request of Temporary Certificate of Occupancy (C.O.)

Engineer's Stamp dated 10/16/06 (H-10/D006A2)

Certification dated 1/14/08

Based upon the information provided in your submittal received 1/16/08, the above referenced certification cannot be approved until the following comments are addressed:

P.O. Box 1293

1. A SO#19 inspection must be completed and approved prior to any approval. Please contact Duane Schmitz for approval of SO#19 at 235-8016.

Albuquerque

2. Include the address for this site.

If you have any questions, you can contact me at 924-3982.

New Mexico 87103

Sincerely,

www.cabq.gov

Timothy Sims

Plan Checker, Hydrology

Development and Building Services

C: File H-10/D006A2

CITY OF ALBUQUERQUE



Planning Department Transportation Development Services Section

January 24, 2008

George R. Rainhart, Registered Architect, George Rainhart Architects 2325 San Pedro NE, Ste. 2-B Albuquerque, NM 87110

Re:

Approval of Temporary Certificate of Occupancy (C.O.) for Walgreens at Ladera Industrial Center, Lot C, [H-10 / D6A2]

Ladera Industrial Park, Lot 1C Architect's Stamp Dated 01/23/08

Dear Mr. Rainhart:

Based on the information provided on your submittal dated January 23, 2008, the above referenced project is approved for a 90-day Temporary C.O.

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

A Temporary C.O. has been issued allowing the outstanding *H.C. ramp* (*I/S* of *Unser and Vista Oriente ramp is not ADA compliant and domes are incorrectly located, at Walgreens entrance truncated domes need to be provided); location of railing off <i>Unser is incorrectly shown; and asphalt curbs are missing from Unser's northern ramp approaches (per discussion requirements)*; issues to be completed within this time period. When these remaining issues have been fully completed, are in substantial compliance, and a final Certification for Transportation has been resubmitted to the City's Hydrology office for approval, a Permanent C.O. will be issued.

The Certification package for Final C.O. must include an <u>exact</u> copy of the approved TCL, or signed off D.R.B. Site Plan, which is in each of the two City Permit Plan Sets—the contractor's City field set and the City's plan set in the basement of the Plaza Del Sol building. Package also must include a letter of certification on designer's letterhead-stamped with his seal, signed, and dated. Submit package along with fully completed Drainage Information Sheet to front counter personnel for log in and evaluation by Transportation.

If you have apy questions, please call me at 924-3630.

Nilo E. Salgado-Pernandez, P.E.

Senior Traffic Engineer

Development and Building Services

Planning Department

C:

Sincerely

Engineer
Hydrology file
CO Clerk

PROJECT TITLE: LADERA INDUSTRIAL CONTER LOT DRB#: 07008-00535 EPC#:	ZONE MAP/DRG: FILE #. DESS
	/ (A 17 2. /)
LEGAL DESCRIPTION: LOT 1-C., LADGRA INDUSTRIA. CITY ADDRESS:	- C6/0/6/2
ENGINEERING FIRM:	CONTACT:
ADDRESS	PHONE:
CITY, STATE:	ZIP CODE:
OWNER:	
ADDRESS:	CONTACT:
CITY, STATE:	PHONE: ZIP CODE:
	•
RCHITECT: GEORGE RAINHART ARCHITECT	CONTACT: JON STERN
ADDRESS: 2325 5AW PEORO NG SUITE	28 PHONE: 884-9110 EXT. 110
CITY, STATE: ALBUQUERQUE, NIM	
OR YETOR: ADDRESS:	CONTACT:
CITY, STATE:	ZIP CODE:
ONTRACTOR:	CONTACT:
ADDRESS:	PHONE:
CITY, STATE:	ZIP CODE:
	ECK TYPE OF APPROVAL SOUGHT:
DRAINAGEPLAN 1 st SUBMITTAL	SIA/FINANCIAL GUARANTEE RELEASE
DRAINAGE PLAN RESUBMITTAL	PRELIMINARY PLAT APPROVAL S DEW DI ANTEOD STEPPO APPROVAT
CONCEPTUAL G & D PLAN	S. DBY. PLAN FOR SUB'D APPROVALS. DBY: FOR BLDG. PERMIT APPROVAL
GRADING PLAN	SECTOR PLAN APPROVAL
EROSION CONTROL PLAN	FINAL PLAT APPROVAL
ENGINEER'S CERT (HYDROLOGY)	FOUNDATION PERMIT APPROVAL : :
CLOMR/LOMR	BUILDING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT	CERTIFICATE OF OCCUPANCY (PERM)
ENGINEER'S/ARCHITECT'S CERT (TCL) ENGINEER'S CERT (DRB SITE PLAN)	CERTIFICATE OF OCCUPANCY (TEMP)
OTHER OF STANDARD STAB PLAIN)	GRADING PERMIT APPROVAL
	WORK OPPERMIT APPROVATION IN THE WORK OPPER A PROPERTY AND A PROPE
	OTHER (SPECIFY)
	3 0008
AS A PRE-DESIGN CONFERENCE ATTENDED:	JAN 23 TOOG
YES.	
NO	"mROLOG"
COPY PROVIDED	HYDROLOGY
BMITTED BY:	DATE: VZ3/08
	DAID:

2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.

Sector Plans.

3. Drainage Report: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

TRAFFIC CERTIFICATION

I, George Rainhart, NMPE OR NMRA ____NMRA ___, OF THE FIRM _George Rainhart Architect & Associates _, HEREBY CERTIFY THAT THIS PROJECT HAS IS IN DESIGN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED __March 15, 2007 _. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY _Jonathan Stern OF THE FIRM _George Rainhart Architects _. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON _March 1, 2007 _ AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR Permanent Certificate of Occupancy _.

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.

Signature of Engineer or Architect

ENGINEER'S OR ARCHITECT'S STAMP

GEORGE R.

RAINHART

NO. 580

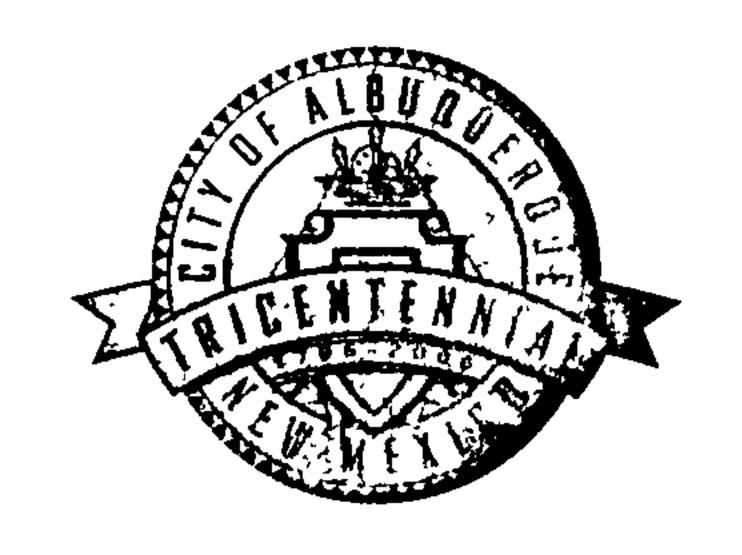
CSTERED ARCHITY

// //. Date

RECEIVED
JAN 23 7803

HYDROLOGY SECTION

CITY OF ALBUQUERQUE



June 26, 2007

Ronald Ray Bohannan, P.E. Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM 87109

Re: Walgreen's at Ladera Industrial Park Grading and Drainage Plan Engineer's Stamp dated 6-20-07 (H10/D6A2)

Dear Mr. Bohannan,

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Based upon the information provided in your submittal received 6-20-07, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

- The rundown on the southeast corner of Lot 1D must be sized to convey the runoff from Lots 1B, 1C, and 1D. Provide build notes and calculations.
- The proposed storm drain across lot 1D is not in the easement along the frontage.
- Is the type "E" inlet (grate 5198.00) supposed to be a Type "D"?
- Show both 8" DIP (P-4) lines on the plan.
- You reference SDR35 for DIP and RCP. It is a plastic pipe specification.
- Owners of Lot 1C will be responsible for maintenance of the storm drain piping on Lot 1D. A maintenance agreement stating so is required.
- I would recommend DIP or RCP IV for Pipe P-3 since there is only 1 foot of cover.
- This plan shows construction activities on lot 1B, which is owned by a different party than lot 1C. Their permission is required.
- Type "D" inlets are per COA STD DWG 2206, not 2202.
- The drainage report specifies that a curb cut will be located east of the retail building to pass offsite flows from Basin 1B. Then this runoff will continue in a concrete rundown into the storage center entrance. Where is the curb cut? How much of the 7.6 cfs will enter inlets I-1, I-2 and I-3?

Sincerely,

If you have any questions, you can contact me at 924-3695.

Curtis A. Cherne, P.E.

Engineering Associate, Planning Dept.

Development and Building Services

C: file

DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)

			DleAZ
OJECT TITLE:	Walgreens @ Ladera Industrial Park	ZONE MAP/	DRG. FILE #: H-10/D6A1
ال RB ا		WORK ORD	
			
LEGAL DESCRIPTION	LOT 1C OF LADERA INDUSTRIAL PARK		
CITY ADDRESS:	UNSER BOULEVARD NW BETWEEN OLD OU	RAY ROAD NW A	ND VISTA ORIENTE STREET NW
ENGINEERING FIRM:	TIERRA WEST, LLC	CONTACT:	JOEL HERNANDEZ
ADDRESS:	5571 MIDWAY PARK PLACE NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87109
		-	
OWNER:	CAP, II - C/O GEORGE RAINHART ARCHITECTS	CONTACT:	JON STERN
ADDRESS:	2325 SAN PEDRO NE, SUITE 2-B	PHONE:	(505) 884-9110 Ext. 110
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87110
ARCHITECT:	GEORGE RAINHART ARCHITECTS & ASSOCIATES	-	JON STERN
ADDRESS:	2325 SAN PEDRO NE, SUITE 2-B	PHONE:	(505) 884-9110 Ext. 110
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87110
		00117107	
SURVEYOR:	SURV-TEK, INC	CONTACT:	RUSS HUGG
ADDRESS:	9384 VALLEY VIEW DRIVE	PHONE:	(505) 897-3366
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87114
CONTRACTOR.		CONTACT:	
CONTRACTOR: ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
OILL, OIATE.			
CHECK TYPE OF SUBM	HTTAL:	CHECK TYPE OF	APPROVAL SOUGHT:
DRAINAGE REF	PORT	SIA / FINAN	IACIAL GUARANTEE RELEASE
	N 1st SUBMITTAL, REQUIRES TCL or equal		RY PLAT APPROVAL
	AN RESUBMITTAL		AN FOR SUB'D. APPROVAL
	GRADING & DRAINAGE PLAN		AN FOR BLDG. PERMIT APPROVAL
X GRADING PLAN			LAN APPROVAL
EROSION CON			
CLOMR/LOMR	ERTIFICATION (HYDROLOGY)	· · · · · · · · · · · · · · · · · · ·	ON PERMIT APPROVAL PERMIT APPROVAL
	II ATION I AVOLIT (TCL)		TE OF OCCUPANCY (PERM.)
	JLATION LAYOUT (TCL) ERTIFICATION (TCL)		TE OF OCCUPANCY (TEMP.)
	ERTIFICATION (DRB APPR. SITE PLAN)		PERMIT APPROVAL
X OTHER	Comment response letter		ERMIT APPROVAL
	Committee to the factor		DER APPROVAL
		SO-19	
WAS A PRE-DESIGN CO	ONFERENCE ATTENDED:		
YES			
X NO			[] JUN 2 0 2007
COPY PROVIDE	ED		
			HVDDOLOGY
			HYDROLOGY SECTION

DATE SUBMITTED: 6/19/2007 BY: JOEL HERNANDEZ, PE

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

- 1. Conceptual Grading and Drainage Plans: 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.



5571 Midway Park Place NE Albuquerque, NM 87109

(505) 858-3100 fax (505) 858-1118

twllc@tierrawestllc.com 1-800-245-3102

June 20, 2007

Mr. Bradley L. Bingham, P.E. Senior Engineer City of Albuquerque P.O. Box 1293 Albuquerque, NM 87103

RE: Drainage Plan Approval

Walgreens at Ladera Industrial Park (H10/D6A1)

Dear Mr. Bingham:

Tierra West, LLC, in response to the comment letter dated January 31, 2007, hereby submits for your review and approval a revised grading and drainage plan and accompanying pipe flow calculations.

We respectfully submit the following responses to the individual comments:

The rundown on the southeast corner of Lot 1D must be sized to convey the runoff from Lots 1B, 1C, and 1D. Provide build notes and calculations.

N.

Response: The sidewalk culvert proposed is sized to convey the flows directed to the facility by the proposed drainage structures. Sizing of additional sidewalk culverts to accommodate future development should be done concurrently with the grading design of those lots, as different configurations are possible. ?

State there is a drainage easement on the plan or in the report.

Response: A reciprocal utility easement was granted by the subdivision plat (attached) to allow storm drainage installation, repair, maintenance, replacement, etc.

So $\sim 110^{-1}$

COA STD DWG 2202 does not contain a type "E" inlet. It looks like the inlets are on the curb. Are they supposed to be in the gutter?

Response: The inlet type designation per COA STD DWG 2202 was revised to Type "A".

Provide flow calculations.

Response: Hydrologic and hydraulic calculations for pipe flow are attached, as requested.

The single cleanout, manhole and pipe running north-south on Lot 1D should be moved west to this lot.

Response: The pipe and facilities running north-south on Lot 1D was relocated as requested.

Owners of Lot 1C will be responsible for maintenance of the storm drain piping on Lot 1D. A maintenance agreement stating so is required.

NO

Response: Lot 1C and Lot 1D now have the same ownership.

The plan should not be entitled "Conceptual..." when submitting for Building Permit.

Response: The plan title was updated to remove "Conceptual . . . " from the title.

If you have any questions, or require any additional information, please do not hesitate to contact our office.

Sincerely,

Ronald R. Bohannan, P.E.

Enclosures JN: 24086 RRB/JH/bm

27009-4-13-07-Bradley Bingham-Hydrology.doc

CITY OF ALBUQUERQUE



January 31, 2007

Ronald Ray Bohannan, P.E. Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM 87109

Re: Walgreen's at Ladera Industrial Park Conceptual Grading and Drainage Plan

Engineer's Stamp dated 12-27-06 (H10/D6A1)

Dear Mr. Bohannan,

Based upon the information provided in your submittal received 12-28-06, the above referenced plan is approved for Grading Permit. This project requires a National Pollutant Discharge Elimination System (NPDES) permit.

P.O. Box 1293

However, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

Albuquerque

• The rundown on the southeast corner of Lot 1D must be sized to convey the runoff from Lots 1B, 1C, and 1D. Provide build notes and calculations.

Nam Marian 07102

• State there is a drainage easement on the plan or in the report.

New Mexico 87103

• COA STD DWG 2202 does not contain a type "E" inlet. It looks like the inlets are on the curb. Are they supposed to be in the gutter?

www.cabq.gov

- Provide pipe flow calculations.
- The single cleanout, manhole and pipe running north-south on Lot 1D should be moved west to this lot.
- Owners of Lot 1C will be responsible for maintenance of the storm drain piping on Lot 1D. A maintenance agreement stating so is required.
- The plan should not be entitled "Conceptual...." when submitting for Building Permit.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, E.I.

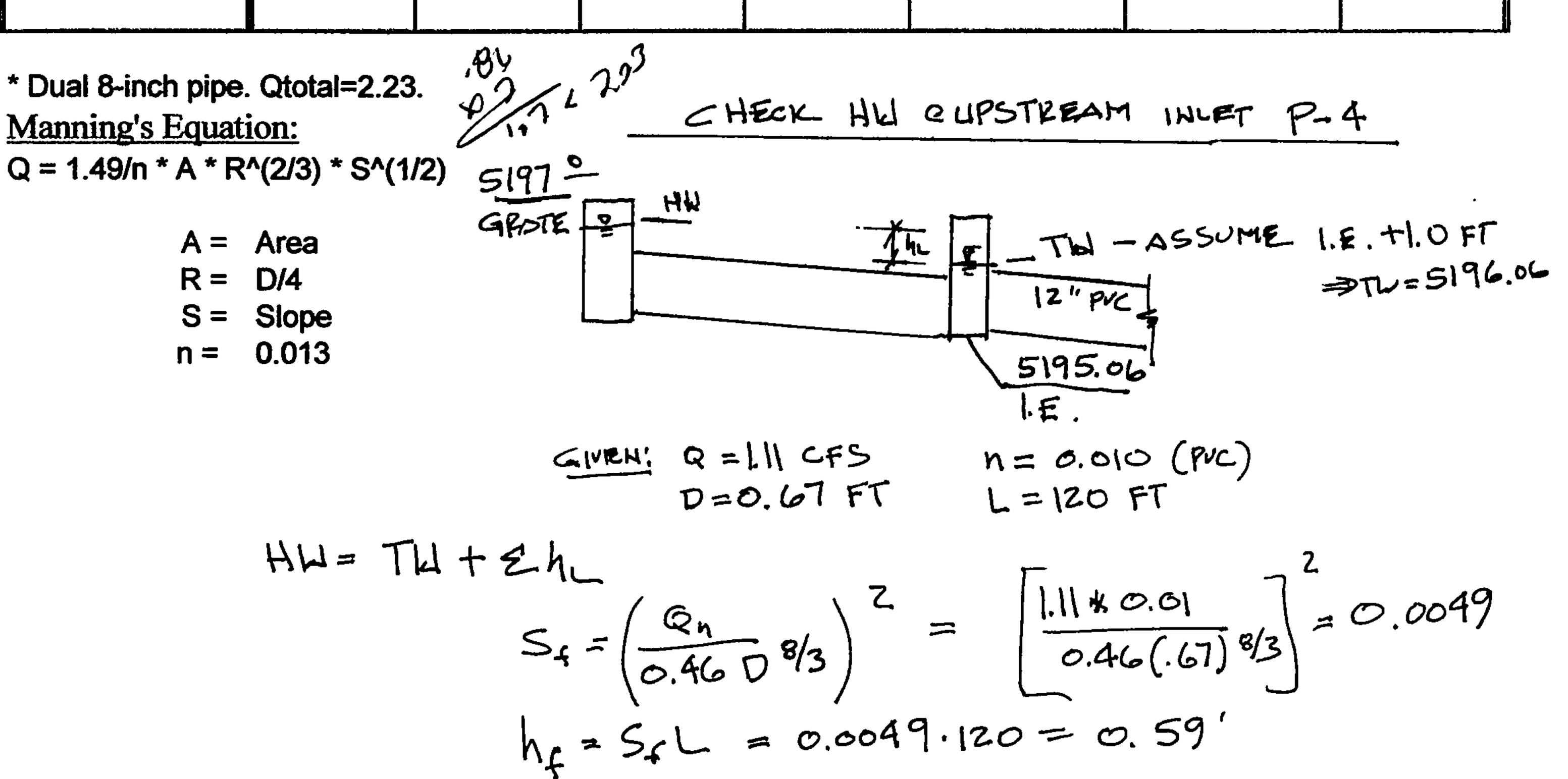
Engineering Associate, Planning Dept. Development and Building Services

C: file

Sertil Kanbar, DMD

Pipe Capacity

Pipe	D	Slope	Area	R	Q Provided	Q Required	Velocity
	(in)	(%)	(ft^2)		(cfs)	(cfs)	(ft/s)
Option A							
P-1	18	0.5	1.77	0.375	7.45	7.33	4.15
P-2	18	0.3	1.77	0.375	5.77	5.71	3.23
P-3	12	0.74	0.79	0.250	3.07	3.07	3.91
? P-4*	8	0.5	0.35	0.167	0.86	1.11	3.18
P-5	10	0.89	0.55	0.208	2.07	1.62	2.97
P-6	8	0.9	0.35	0.167	1.15	1.11	3.18



h_(OUTLET) = KOUT $\frac{V_0^2}{Zg} = 1.0 * \frac{Q^2}{A^2 Zg} = \frac{1.11^2}{(1/4 \cdot 0.67^2)^2 \cdot 2 \cdot 32.2}$

HIL = 5196.06 + 0.59 + 0.15 > 5196.80 Z GROTE ELEV.

he outlet = 0.15

Weighted E Method

Lot 1-C

Developed Basins

													100-Year			10-Year			2-Year	
Basin	Area	Area	Area	Treat	ment A	Trea	tment B	Trea	tment C	Trea	tment D	Weighted E	Volume	Flow	Weighted E	Volume	Flow	Weighted E	Volume	Flow
- +	(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)	(ac-ft)	cfs	(ac-ft)	(ac-ft)	cfs
1-1	29775.00	0.684	0.00107	0%	0	22%	0.150	0%	0	78%	0 533	1.684	0.096	2.64	1.016	0 058	1.66	0.564	0 032	0.91
I-2	9464.00	0 217	0.00034	0%	0	22%	0.048	0%	0	78%	0.169	1.684	0.030	0.84	1.016	0 018	0 53	0.564	0.010	0.29
I-3	25177.00	0.578	0.00090	0%	O	22%	0.127	0%	Q	78%	0.451	1.684	0 061	2.23	1.016	0.049	1,40	0.564	0.027	0.77
1-4	5781.00	0.133	0.00021	0%	0	22%	0.029	0%	0	78%	0.104	1 684	0.019	0 51	1.016	0.011	0.32	0 564	0.006	0.18
I-5	12495.00	0.287	0.00045	0%	0	22%	0.083	0%	0	78%	0.224	1.684	0 040	1.11	1.016	0.024	0.69	0.564	0.013	0.38
	82692.00	1.90			0.00		0.42	<u> </u>	0.00		1.48	<u> </u>	0.27	7.32						

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

.

FHWA Urban Drainage Design Program, HY-22 HYDRAULIC PARAMETERS OF OPEN CHANNELS

Trapezoidal, Rectangular, or Triangular X-Section Date: 06/19/2007

Project No. :24086

Project Name.: Walgreens at Unser and Vista Oriente

Computed by :Joel Hernandez

INPUT PARAMETERS

 1.	Channel Slope (ft/ft)		2.00 2.00 8m unt
2.	Channel Bottom Width (ft)		2.00 ch.
	Left Side Slope (Horizontal to	1)	0.00
	Right Side Slope (Horizontal to		0.00
	Manning's Coefficient		7 0.013
	Discharge (cfs)	Ø,	(7.32) = (100)
	Depth of Flow (ft)		(7.32) = 700 $(7.32) = 700$ $(0.47) = 70$
		70,	

OUTPUT RESULTS

0.94
7.79
2.00
0.32
2.00

· CHECK 2-FT SIDEWALK CULVERT PER COA STD 2236:

DAVAILABLE = 0.5' > DN = 0.47 : OK

5571 Midway Park Place NE Albuquerque, NM 87109

(505) 858-3100 fax (505) 858-1118 twllc@tierrawestllc.com 1-800-245-3102

October 16, 2007

Mr. Bradley L. Bingham, P.E. Senior Engineer City of Albuquerque P.O. Box 1293 Albuquerque, NM 87103

RE: Drainage Construction Revision, Walgreens at Ladera Industrial Park (H10/D6A1)

Dear Mr. Bingham:

Tierra West, LLC, as a result of changes implemented in the field, submits for your review and approval a revised grading and drainage plan and accompanying hydraulic calculations.

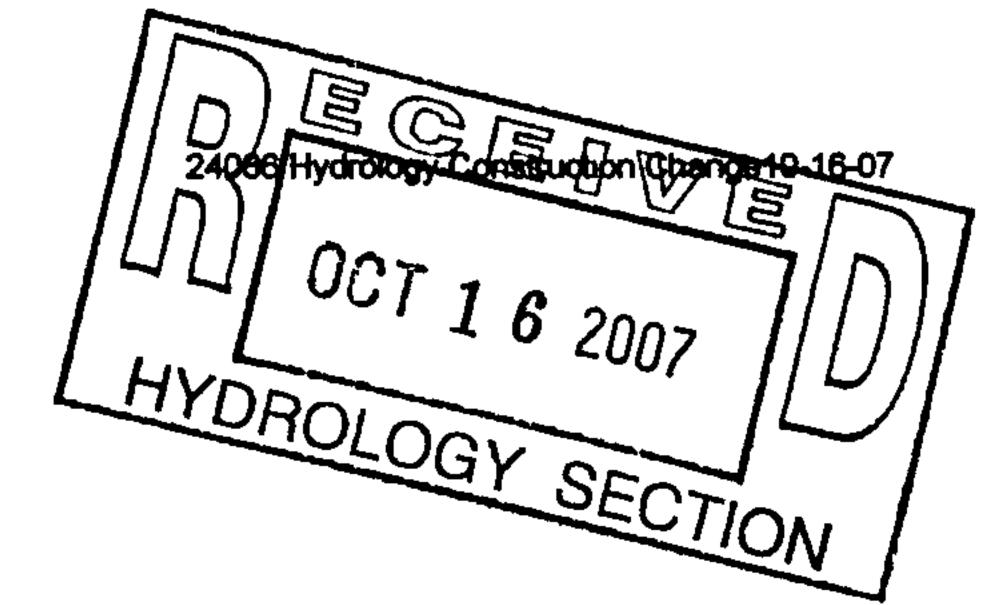
The contractor installed the storm drain from an unapproved set of plans, which would not provide the required capacity. As a result, we have redesigned the system to accommodate the facilities that have been installed while providing the required capacity. To accomplish this we have designed dual pipes in the upstream portion of the system, and converted an inlet (I-1) to a downdrain so as to convey this surface flow across Lot 1-D as surface drainage. The proposed development of Lot 1-D will accommodate the revised drainage configuration and coordinating the change will be seamless as our firm has been retained to prepare development plans for Lot 1-D and the developer of Lot 1-C is the owner of Lot 1-D. The revised design incorporates a temporary retention pond and construction details, as requested by Curtis Cherne during a preliminary design meeting.

We respectfully request expedited review, as this project is under construction. If you have any questions, or require any additional information, please do not hesitate to contact our office.

Sincerely,

Joel Hernandez, ざ.E.

Enclosures JN: 24086 RRB/JH/bdm SONAL ENGINE



DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: DRB #: Project #100240	Ladera Industrial Park 4 EPC #: 03EPC-01211		ZONE MAP/E WORK ORD	DRG. FILE #: <u>H-9/Da18</u> ER #:
LEGAL DESCRIPTION: CITY ADDRESS:	All of Portion of Lot 1, Ladera Industrial Park Unser Blvd. NW between Old Ouray Rd. NW a	nd Vista	Oriente St. N	W
ENGINEERING FIRM: ADDRESS: CITY, STATE:	TIERRA WEST, LLC 8509 JEFFERSON NE ALBUQUERQUE, NM		CONTACT: PHONE: ZIP CODE:	RONALD R. BOHANNAN, P.E. (505) 858-3100 87113
OWNER: ADDRESS: CITY, STATE:	AMC DEVELOPMENT SERVICES 1015 Tijeras NW, Suite 200 Albuquerque, NM		CONTACT: PHONE: ZIP CODE:	Jeff Jesionowski 505) 338-2285 87102
ARCHITECT: ADDRESS: CITY, STATE:			CONTACT: PHONE: ZIP CODE:	
SURVEYOR: ADDRESS: CITY, STATE:	Community Sciences Corporation 4481 Corrales Road Corrales, NM		CONTACT: PHONE: ZIP CODE:	Cliff Spirock (505) 897-0000 87048
CONTRACTOR: ADDRESS: CITY, STATE:			CONTACT: PHONE: ZIP CODE:	
CHECK TYPE OF SUBMIT	TAL:	CHECK	<u>(TYPE OF APE</u>	PROVAL SOUGHT:
DRAINAGE PLA CONCEPTUAL X GRADING PLAN EROSION CON ENGINEER'S CO CLOMR/LOMR TRAFFIC CIRCU ENGINEERS CO ENGINEERS CO OTHER	NN 1st SUBMITTAL, <i>REQUIRES TCL or equal</i> NN RESUBMITTAL GRADING & DRAINAGE PLAN N		PRELIMINAR S. DEV. PLA S. DEV. PLA SECTOR PL FINAL PLAT FOUNDATIC BUILDING P CERTIFICAT GRADING P PAVING PER	ERMIT APPROVAL SERMIT APPROVAL TE OF OCCUPANCY (PERM.) TE OF OCCUPANCY (TEMP.) ERMIT APPROVAL RMIT APPROVAL ER APPROVAL
X NO COPY PROVIDE		N		
DATE SUBMITTED:	5/4/2004	BY:	Tyler Ashto	n, PE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail.

One or more of the following levels of sumbittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plans: 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

6 "

DRAINAGE REPORT

for

Ladera Industrial Center Lot 1 Northeastern corner of Unser Boulevard and 98th Street Albuquerque, New Mexico

Prepared by:

Tierra West, LLC 8509 Jefferson NE Albuquerque, New Mexico 87113

April, 2004

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

Ronald R. Bohannan

Job No 220090

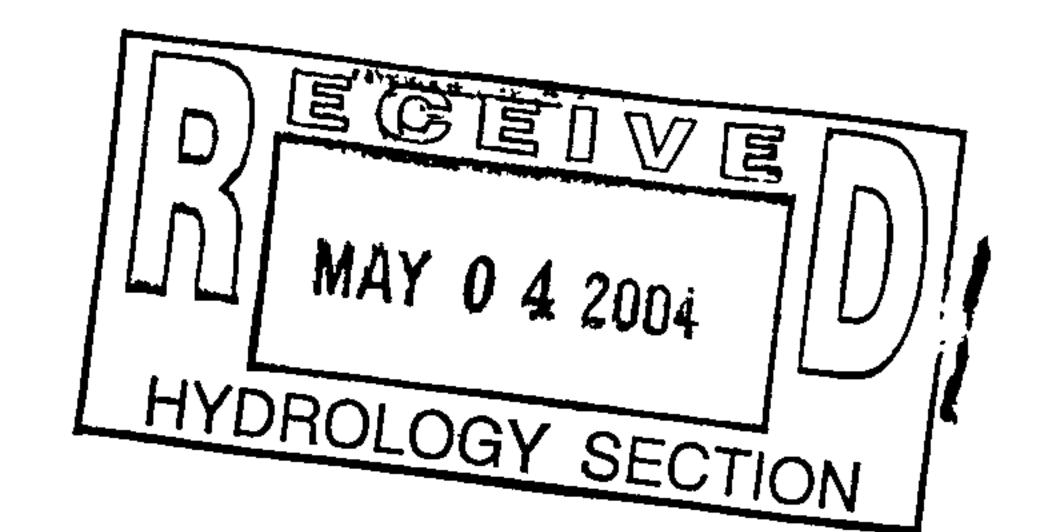


TABLE OF CONTENTS

Purpose	
PurposeIntroduction	ુ
Vicinity Map, Exhibit A	4
FIRM Map, Exhibit B	5
Existing Conditions	6
Proposed Conditions	6
Summary	6
Runoff Calculations	7-8
Map Pockets	
Site Grading and Drainage Plan, Map Pocket A	A
Developed Conditions Basin. Map Pocket B	R

PURPOSE

The purpose of this report is to provide the drainage management plan for the development of Ladera Industrial Center Lot 1. This plan will be utilized for the development of the subject 11.94-acre property, for the use of a storage facility and undetermined pad sites. This plan is in accordance with the DPM, Chapter 22, Hydrology Section. The purpose of this report is to provide the drainage analysis and management plan for the new site.

INTRODUCTION

The subject of this report, as shown on the Exhibit A vicinity map, is a 11.94-acre parcel of land located at the northeast corner of Unser Boulevard and 98th Street, zone atlas page H-9. The site is in the City of Albuquerque, Bernalillo County, New Mexico and is currently undeveloped. The legal description of the property is Lot 1, Ladera Industrial Center. The property has been split into four lots, 1-A through 1-D. As shown on FIRM map 35001C0326D, Lot 1-A does lie within a flood zone. Lot 1-A consists of the Ladera Diversion Channel, no development is proposed for this lot. A previous drainage report was done by Mark Goodwin and Associates in Nov. 2002 for the Ladera Business Park. The drainage report states that this Lot 1 has free discharge to Vista Oriente.

Exhibit A- Vicinity Map

Exhibit B – FIRM Map

EXISTING CONDITIONS

The site is currently undeveloped and slopes from west to east. The 11.94-acre site, is bounded on the north by the Ladera Diversion Channel and on the south by Vista Oriente Right of Way. Currently the site drains to the confluence of the Ladera and Mirehaven channels.

PROPOSED CONDITIONS

Lot 1-A currently consists of the Ladera channel no improvements are planed for this lot. Lot 1-B is currently to be developed as a restaurant, Lot 1-C is to be developed as a retail store, and an enclosed/RV storage business is planned for Lot 1-D. The site has been split into 4 basins corresponded to each lot. The storm water runoff will freely discharge into Vista Oriente.

Basin 1A includes the entire portion of the Ladera channel that is on this site. No improvements are planned for this section of the channel and all the runoff that is generated by this basin is handled by the channel.

Basin 1B includes the proposed restaurant, associated parking lot, and generates 7.6cfs.

The runoff from the building and the east parking lot will flow east to a curb cut that is located east of the Retail building. The runoff will continue in a concrete rundown into the storage center entrance and out into Vista Oriente. A land treatment of 23%B and 77%D was used to generate the runoff numbers for basin 1B.

Basin 1C includes the proposed Retail building, associated parking lot, and generates 8cfs. The runoff from the west half of the parking lot will flow west to two inlets, the storm drain system will daylight at the edge of the storage facility and discharge into Vista Oriente. A land treatment of 22%B and 78%D was used to generate the runoff numbers for basin 1C.

Basin 1D includes the proposed storage facility, and generates 20cfs. The runoff from the facility will sheet flow to the entrance and into Vista Oriente. A land treatment of 16%B and 84%D was used to generate the runoff numbers for basin 1C.

According to the drainage report by Mark Goodwin and Associates Lot 1 may discharge 36cfs into Vista Oriente. Lots 1B-D discharge a total of 36 cfs. A basin calculation sheet is included in the calculations section of this report.

SUMMARY AND RECOMMENDATIONS

Per the pervious drainage report this site has free discharge into Vista Oriente. The development of this site is consistent with the DPM, Chapter 22, Hydrology section. It is recommended this development be approved for rough grading and Site Plan for Subdivision

<u>CALCULATIONS</u>

EXISTING CONDITION

Total Area = 520,093 sfImpervious Area = 520,093 sf

Pervious Area = 0 sf

<u>DEVELOPED CONDITION</u>

Total Area = 520,093 sfImpervious Area = 325,829 sfPervious Area = 194,264 sf

Basin 1A

Total Area = 118,170 sf

Impervious Area = 0 sf

Pervious Area = 118,170 sf

Basin 1B

Total Area = 86,331 sf Impervious Area = 66,473 sf Pervious Area = 19,858 sf

Basin 1C

Total Area = 93,022 sfImpervious Area = 72,571 sfPervious Area = 20,451 sf

Basin 1D

Total Area = 222,570 sf Impervious Area = 186,960 sf Pervious Area = 35,610 sf

MAP POCKET A

SITE GRADING AND DRAINAGE PLAN

Ladera Industrial Center Lot 1

MAP POCKET B

Proposed Basin Map

Ladera Industrial Center Lot 1