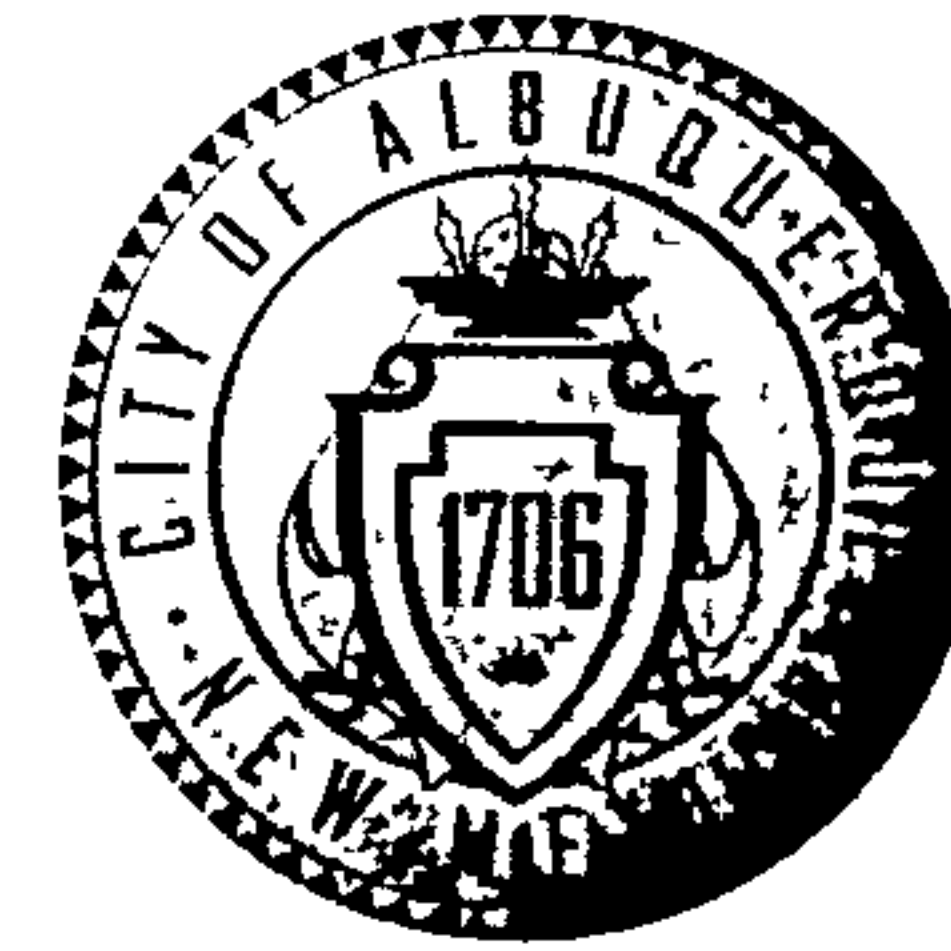


# CITY OF ALBUQUERQUE



August 27, 2010

Gregory J. Krenik, P.E.  
Mark Goodwin & Associates, PA  
P.O. Box 90606  
Albuquerque, NM 87199

**Re: After Hours Pediatrics, on Holly Ave west of San Pedro, Grading and Drainage Plan**

**Engineer's Stamp date 8-25-10 (C18/D073)**

Dear Mr. Krenik,

Based upon the information provided in your submittal received 8-26-10, the above referenced plan is approved for Building Permit and SO 19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

A separate permit (SO 19) is required for construction within City ROW. A copy of this approval letter must be on hand when applying for the excavation/barricading permit.

To obtain a Certificate of Occupancy, Engineer Certification of the Grading Plan per the DPM is required and the sidewalk culvert in the City ROW must be inspected and accepted. Please contact Dave Silva, 857-8074, to schedule an inspection.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge if the disturbed area is greater than or equal to 1 acre.

This project requires a Topsoil Disturbance Permit since it is disturbing  $\frac{3}{4}$  of an acre or more.

Sincerely,

Curtis A. Cherne, P.E.  
Senior Engineer, Planning Dept.  
Development and Building Services

C: file  
Antoinette Baldonado, Excavation and Barricading  
Dave Silva, Street/Storm Drain Maintenance

**DRAINAGE AND TRANSPORTATION INFORMATION SHEET**  
(Rev. 12/05)

PROJECT TITLE: After Hours Pediatrics ZONE MAP/DRG. FILE # C-18 10073  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: Lot 21, Block 18, Tract A, Unit B, NAA  
CITY ADDRESS: [ ]

ENGINEERING FIRM: Mark Goodwin & Associates, PA CONTACT: Gregory J. Krenik  
ADDRESS: P.O. Box 90606 PHONE: 828-2200  
CITY, STATE: Albuquerque, NM ZIP CODE: 87199

OWNER: After Hours Pediatrics CONTACT: Dr. Bill Hawk  
ADDRESS: 9201 Montgomery Blvd. NE PHONE: 298-2505  
CITY, STATE: Albuquerque, NM ZIP CODE: 87111

ARCHITECT: Mullen Heller Architecture CONTACT: Mike Madden  
ADDRESS: 924 Park Ave. SW, Suite B PHONE: 268-4144  
CITY, STATE: Albuquerque, NM ZIP CODE: 87102

SURVEYOR: WayJohn Surveying, Inc. CONTACT: Tim Johnson  
ADDRESS: 330 Louisiana Blvd. NE PHONE: 255-2052  
CITY, STATE: Albuquerque, NM ZIP CODE: 87108

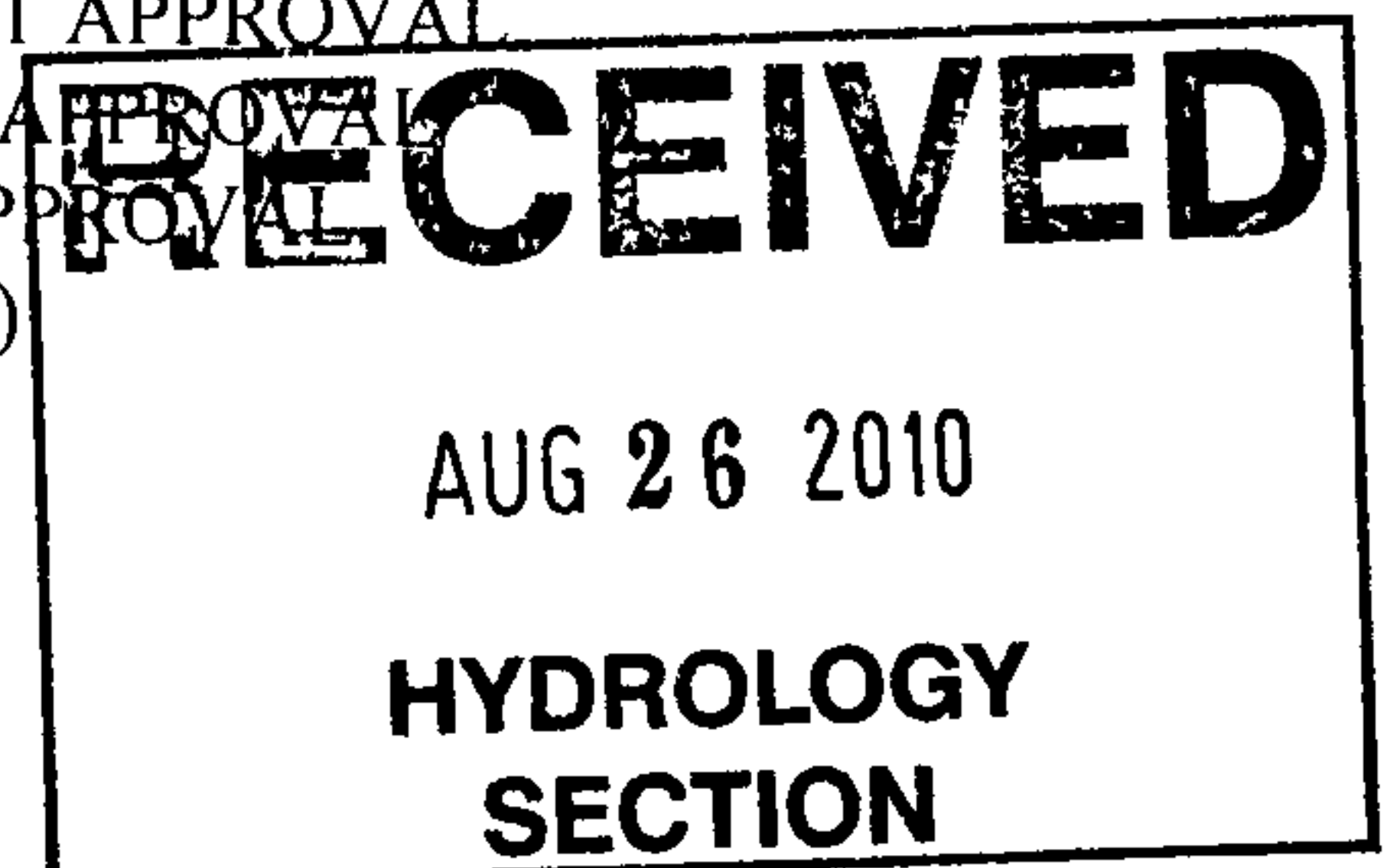
CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

TYPE OF SUBMITTAL:  
☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL  
☐ DRAINAGE PLAN RESUBMITTAL  
☐ CONCEPTUAL G & D PLAN  
☒ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERT (HYDROLOGY)  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT  
☐ ENGINEER/ARCHITECT CERT (TCL)  
☐ ENGINEER/ARCHITECT (DRB SITE PLAN)  
☐ OTHER

CHECK TYPE OF APPROVAL 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  
☐ FOUNDATION PERMIT APPROVAL  
☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY (PERM)  
☐ CERTIFICATE OF OCCUPANCY (TEMP)  
☐ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ WORK ORDER APPROVAL  
☒ OTHER (SPECIFY) cc 5019

WAS A PRE-DESIGN CONFERENCE ATTENDED:  
☒ YES  
☐ NO  
☐ COPY PROVIDED

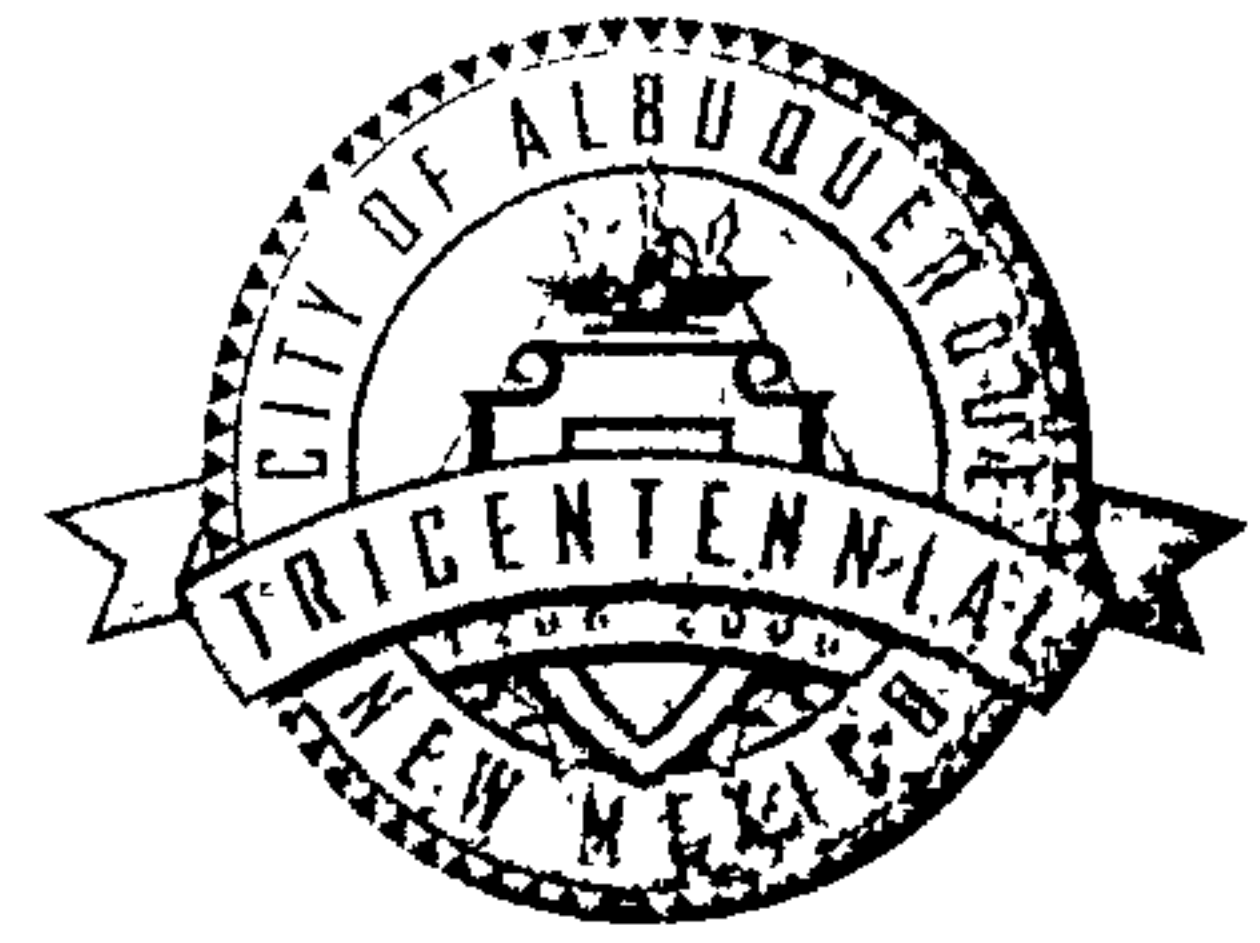
SUBMITTED BY: Gregory J. Krenik, PE  DATE: 8-25-10



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 define 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.

# CITY OF ALBUQUERQUE



March 14, 2008

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

**Re: Paseo Place Commercial Grading and Drainage Plan**  
**Engineer's Stamp dated 2-26-08 (C18/D73)**

Dear Ms. Donart,

Based upon the information provided in your submittal received 2-26-08, the above referenced plan cannot be approved for Building Permit and SO 19 Permit until the following comments are addressed:

- The pond in Basin 4 is retaining runoff. Therefore, it needs to retain the 100 yr-10 day storm. Update the report to reflect this volume and provide the volume of the pond.
- A cross-lot drainage easement is required.

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

Sincerely,

Curtis A. Cherne, P.E.  
Senior Engineer, Planning Dept.  
Development and Building Services

C: file

P.O. Box 1293

Albuquerque

New Mexico 87103

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



# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Paseo Place Commercial

ZONE MAP / DRG. FILE #: C-18

10073

DRB #:

EPC #:

WORK ORDER #:

LEGAL DESCRIPTION: Lots 20 and 21, Block 18, Tract A, Unit B, North Albuquerque Acres

CITY ADDRESS:

ENGINEERING FIRM: Isaacson & Arfman, P.A.

ADDRESS: 128 Monroe St. NE

CITY, STATE: Albuquerque, NM

CONTACT: Genny Donart

PHONE: 268-8828

ZIP CODE: 87108

OWNER: Paseo Place LLC

ADDRESS: 6300 Riverside Plaza Lane NW

CITY, STATE: Albuquerque, NM

CONTACT: Dan Clemmer

PHONE: 889-3061

ZIP CODE: 87120

ARCHITECT: George Rainhart & Associates

ADDRESS: 2325 San Pedro NE, Suite 2-B

CITY, STATE: Albuquerque, New Mexico

CONTACT:

PHONE:

ZIP CODE: 87110

SURVEYOR: Wayjohn Surveying, Inc.

ADDRESS: 330 Louisiana Blvd. NE

CITY, STATE: Albuquerque, New Mexico

CONTACT: Thomas Johnston

PHONE: 255-2052

ZIP CODE: 87108

CONTRACTOR: T.B.D.

ADDRESS:

CITY, STATE:

CONTACT:

PHONE:

ZIP CODE:

## CHECK TYPE OF SUBMITTAL:

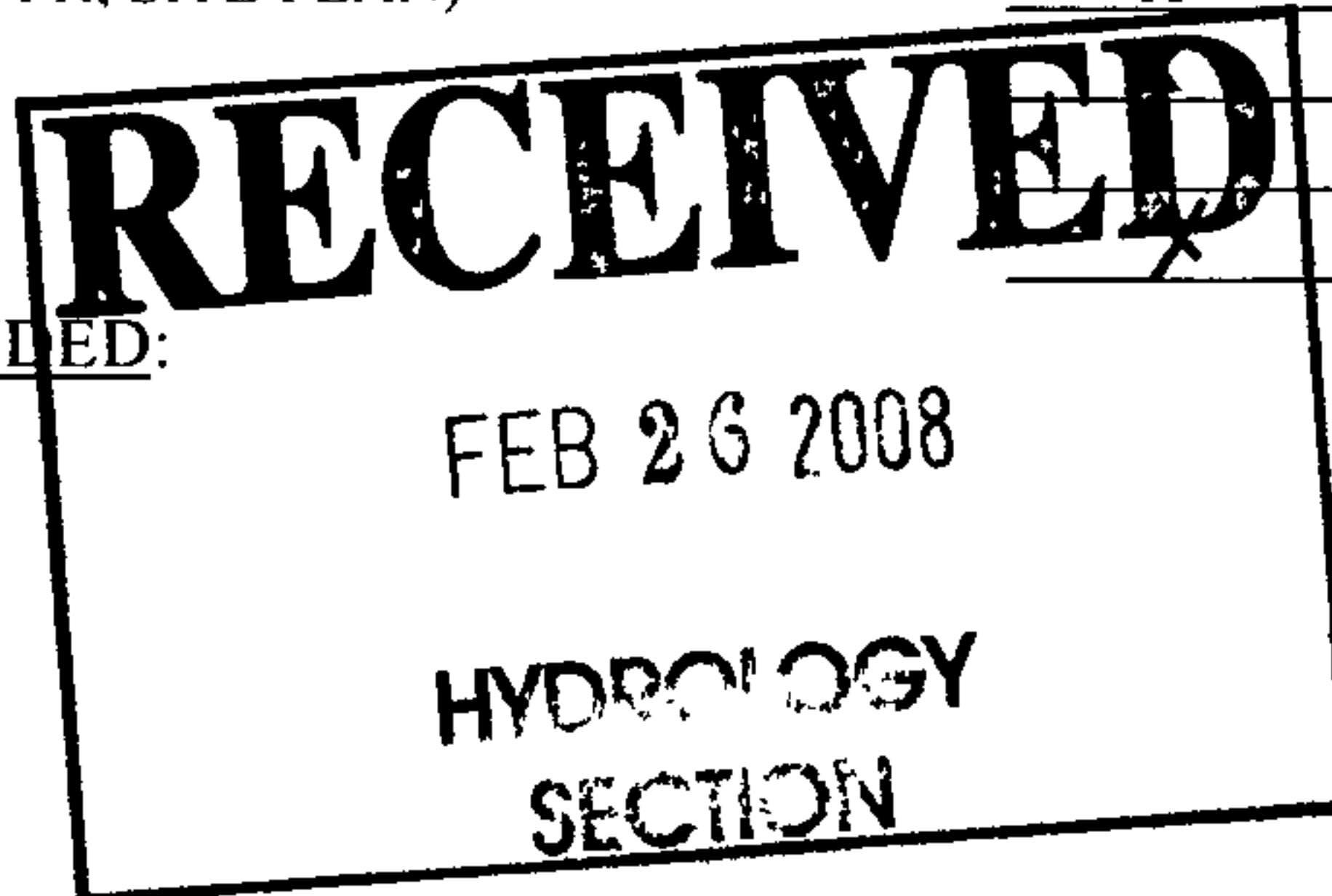
- ☐ DRAINAGE REPORT  
☒ DRAINAGE PLAN 1<sup>ST</sup> *REQUIRES TCL or equal*  
☐ DRAINAGE PLAN RESUBMITTAL  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☒ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION (HYDROLOGY)  
☐ CLOMR / LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ ENGINEER'S CERTIFICATION (TCL)  
☐ ENGINEER'S CERTIFICATION (DRB APPR, SITE PLAN)  
☐ OTHER

## CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D APPROVAL  
☐ S. DEV. PLAN FOR BLDG. PERMIT APPR.  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY (PERM)  
☐ CERTIFICATE OF OCCUPANCY (TEMP)  
☒ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ WORK ORDER APPROVAL  
☒ OTHER - *S.O. 19 APPROVAL*

## WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES  
☐ NO  
☐ COPY PROVIDED



DATE SUBMITTED: Tuesday, February 26, 2008

BY: Genny Donart

Isaacson & Arfman, P.A.

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 submittal may be required based on the following:

1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five acres and Sector Plans
2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five acres
3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five acres or more.

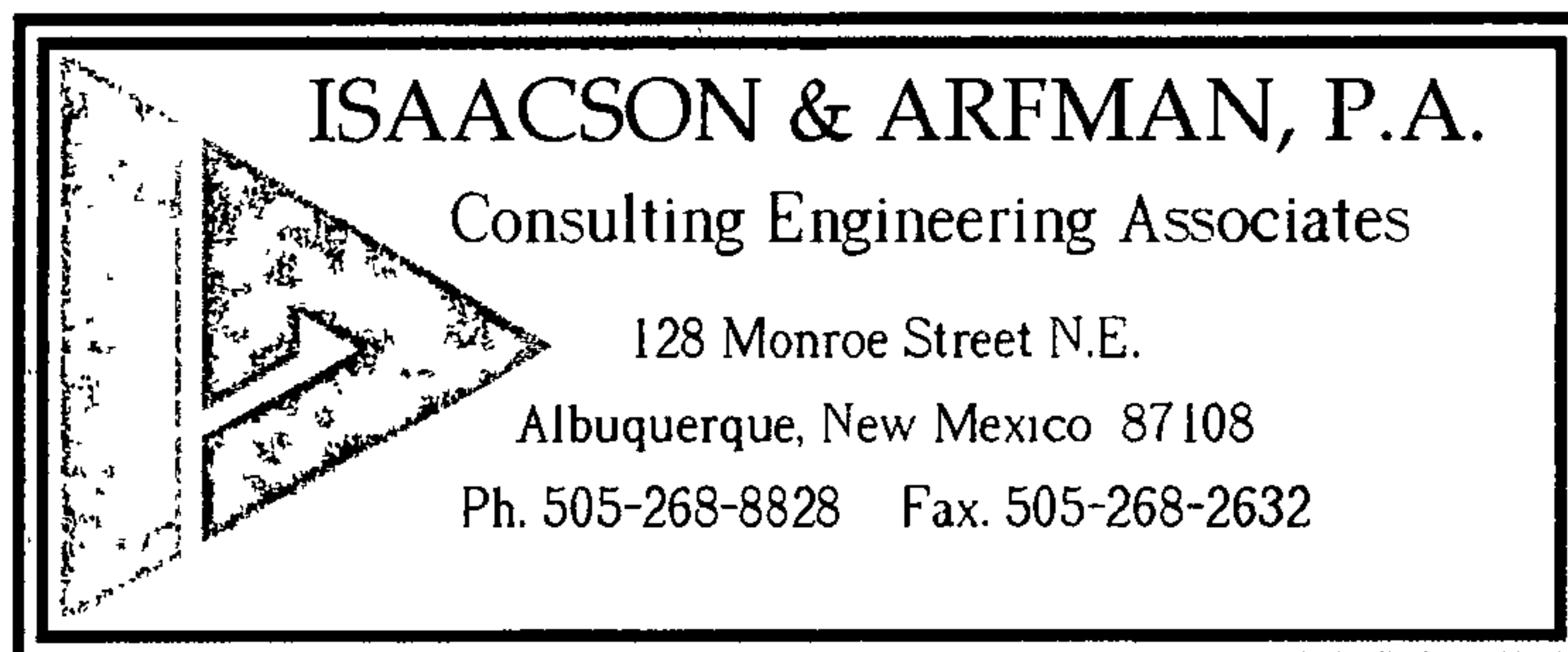
FEBRUARY 21, 2008

# SUPPLEMENTAL INFORMATION

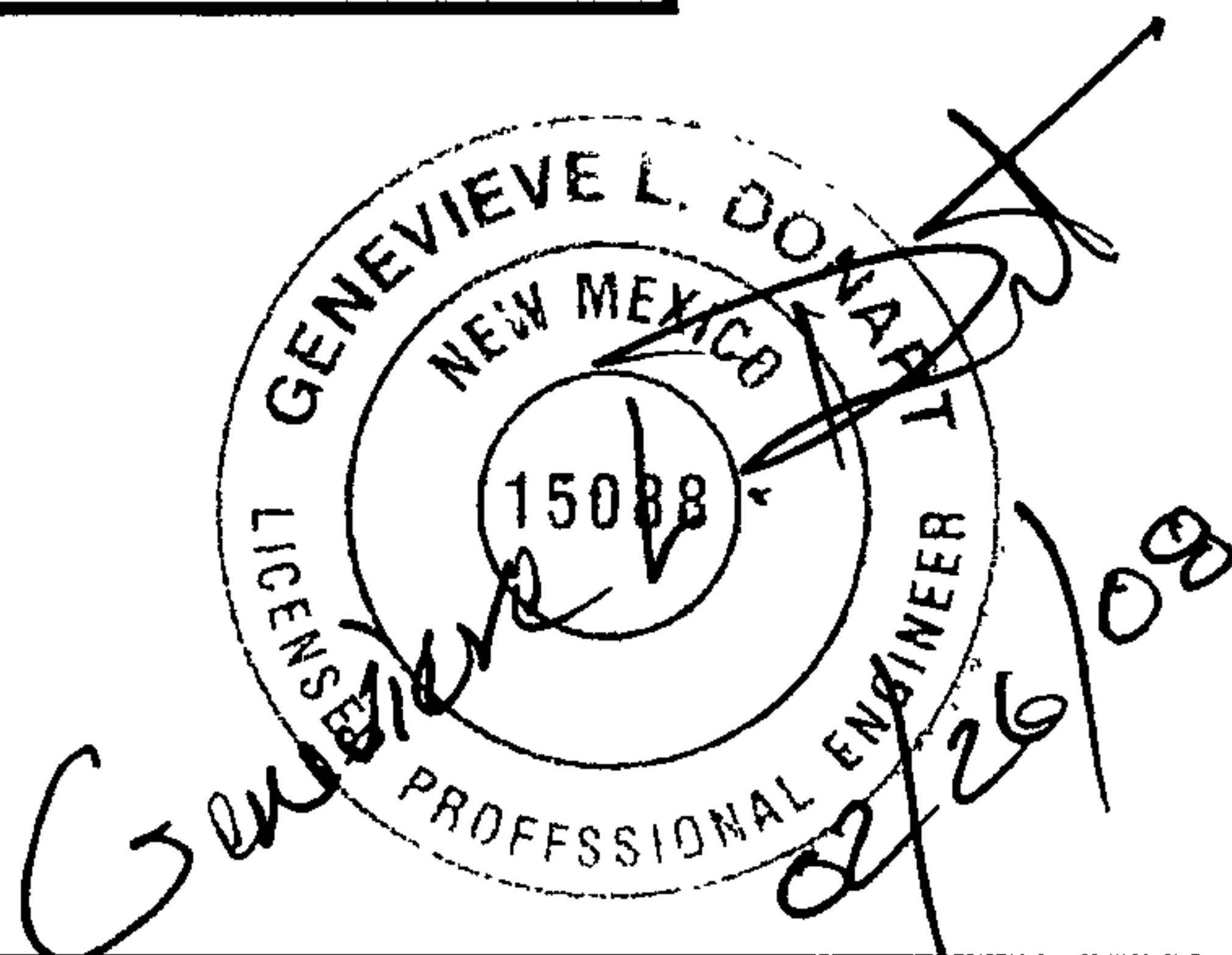
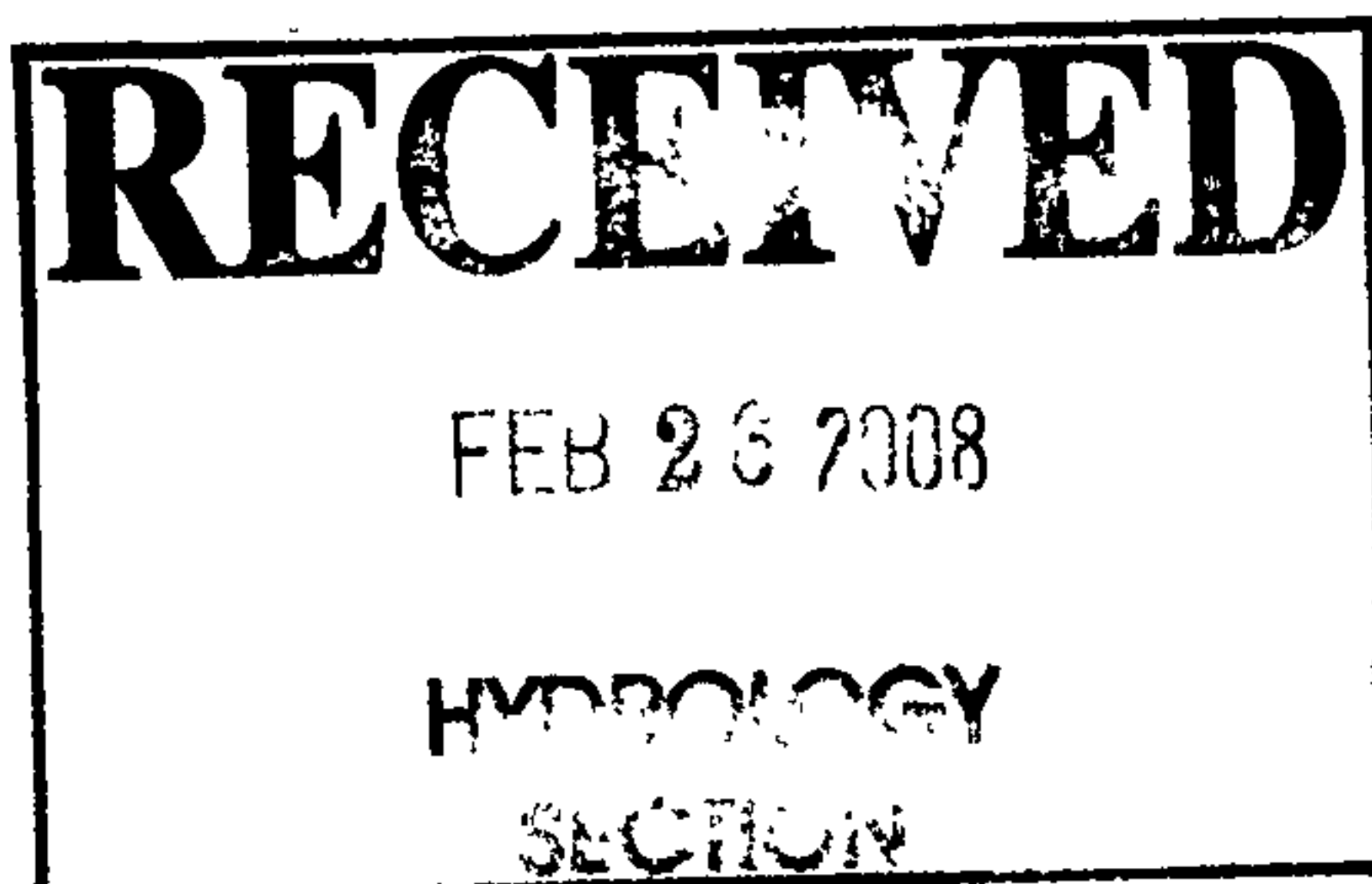
FOR

## PASEO PLACE COMMERCIAL

BY



Project No. 1644



FEBRUARY 21, 2008

**SUPPLEMENTAL INFORMATION**

FOR

**PASEO PLACE COMMERCIAL**

BY



Project No. 1644

## DRAINAGE ANALYSIS

The overall referenced PROPERTY included in this analysis consists of HOLLY PLACE COMMERCIAL, LOTS 20 AND 21, BLOCK 18, TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES for a total of 1.8 acres. The PROPERTY is located on the south side of Holly Avenue west of San Pedro Blvd. – Zone Atlas Page C-18. Paseo del Norte borders the PROPERTY to the south, developed commercial property to the east (currently under construction – same owner) and west and undeveloped commercial property (same owner) and Holly Ave. to the north. The existing site slopes at an average of 3% to the northwest. It has been previously developed and currently, the majority of the site surface consists of deteriorated asphalt and gravel.

The intent of this plan is to show:

- \* Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
- \* The extent of proposed site improvements, including buildings, walks and pavement.
- \* The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City of Albuquerque requirements for drainage management.
- \* The relationship of on-site improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

Pertinent information:

- PROPERTY is located within Floodzone ‘X’ – ‘Areas determined to be outside the 500-year floodplain’.

The PROPERTY was previously developed. Approximately 60% of the PROPERTY consists of deteriorated asphalt and gravel with the remainder hard-packed earth. Per the calculations, the pre-existing discharge is 7.8 cfs.

HISTORIC DISCHARGE			
Area of basin flows =	77036	SF	= 1.8 Ac.
The following calculations are based on Treatment areas as shown			
Sub-basin Weighted Excess Precipitation			
Weighted E	=	1.93	in.
Sub-basin Volume of Runoff			
V360	=	12403	CF
Sub-basin Peak Discharge Rate:			
Qp	=	7.8	cfs
		TREATMENT	
		A =	0%
		B =	0%
		C =	40%
		D =	60%

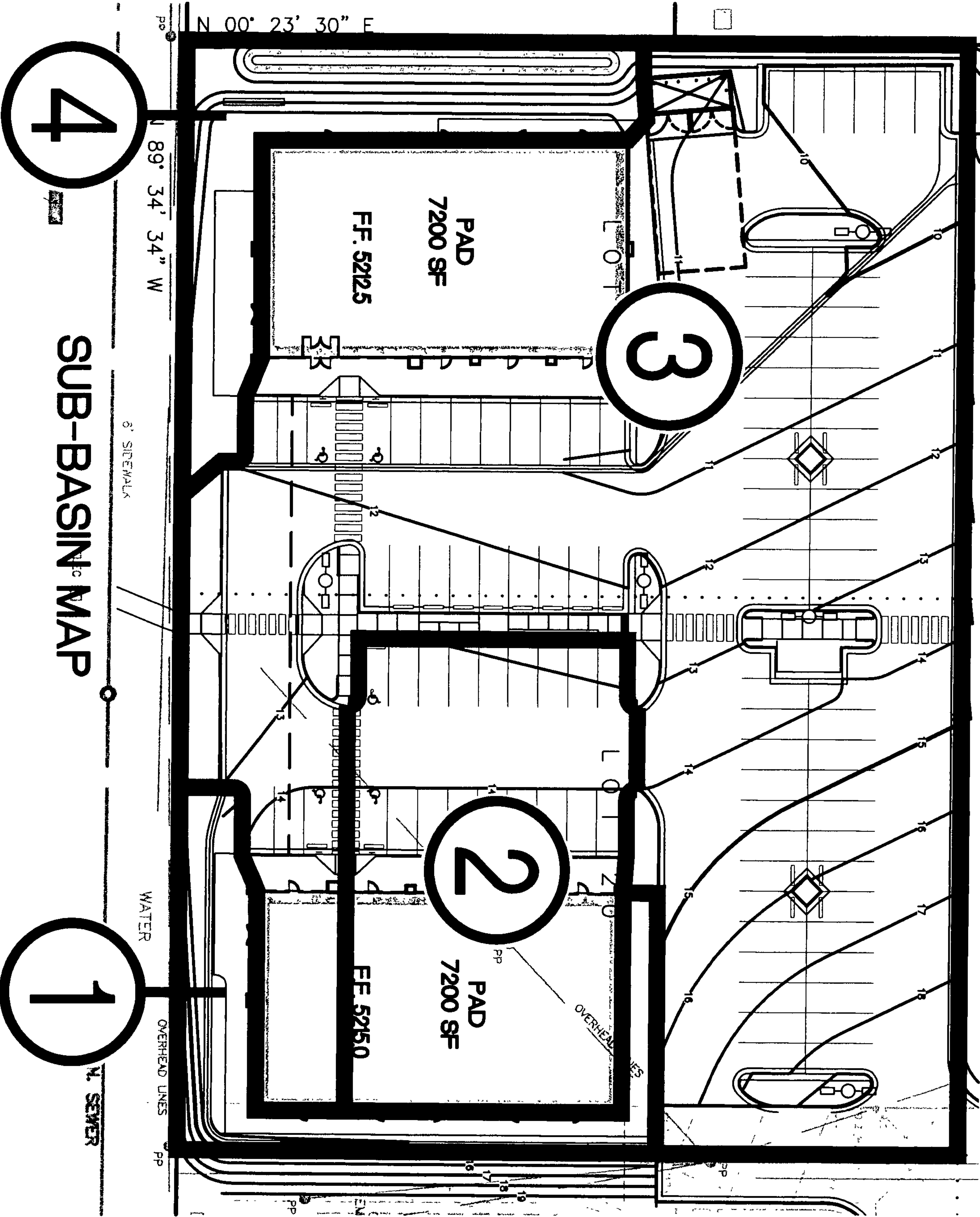
SAD #224, developed for Holly Avenue and approved in 1998 states that flows from PROPERTY have free discharge to Holly Ave. based on assumed developed land treatments of 10%A, 15%B, 10%C, 65%D. Total allowable discharge rate is 7.4 cfs.

ALLOWABLE DISCHARGE PER SAD #224			
Area of basin flows =	77036	SF	= 1.8 Ac.
The following calculations are based on Treatment areas as shown			
Sub-basin Weighted Excess Precipitation			
Weighted E	=	1.87	in.
Sub-basin Volume of Runoff			
V360	=	11986	CF
Sub-basin Peak Discharge Rate			
Qp	=	7.4	cfs
		TREATMENT	
		A =	10%
		B =	15%
		C =	10%
		D =	65%

### PROPOSED SOLUTION:

As part of the approved adjacent Holly Place Commercial Phase II Grading and Drainage Plan submittal (COA Hydrology C18/D77), 100% of the required ponding volume for Lots 12, 13, 14, 15, 18, 19, 20 and 21 (same owner) has been provided for. The Holly Place Commercial ponds include one main detention pond and two minor landscape island ponds which total 5385 cf volume (required volume = 4891 cf), permitting the remainder of Holly Place Commercial to free discharge and removing all detention requirements from Paseo Place Commercial (Lots 12, 13, 20 and 21).





The proposed development consists of four sub-basins (see SUB-BASIN MAP) as follows:

- Sub-basin 1 consists of the southeast portion of the property. This discharge will be routed around the proposed building within a concrete alley gutter and discharged to the asphalt pavement to combine with Sub-basin 3.

		SUB-BASIN 1	
Area of PROPERTY =	4455	SF	= 0.1 Ac.

The following calculations are based on Treatment areas as shown

Sub-basin Weighted Excess Precipitation

Weighted E = 1.59 in.

Sub-basin Volume of Runoff

V360 = 590 CF

Sub-basin Peak Discharge Rate:

Qp = 0.4 cfs

TREATMENT

A = 0%

B = 20%

C = 45%

D = 35%

- Sub-basin 2 consists of the majority of the east building roof discharge and a small portion of pavement. This discharge will be routed through the proposed sidewalk culvert to combine with Sub-basin 3.

		SUB-BASIN 2	
Area of PROPERTY =	11757	SF	= 0.3 Ac.

The following calculations are based on Treatment areas as shown

Sub-basin Weighted Excess Precipitation

Weighted E = 2.36 in.

Sub-basin Volume of Runoff

V360 = 2312 CF

Sub-basin Peak Discharge Rate:

Qp = 1.4 cfs

TREATMENT

A = 0%

B = 0%

C = 0%

D = 100%

- Sub-basin 3 consists of the remainder of the asphalt paving and roof discharge.

SUB-BASIN 3			
Area of PROPERTY =	54699	SF	= 1.3 Ac.

The following calculations are based on Treatment areas as shown

Sub-basin Weighted Excess Precipitation

Weighted E	=	2.27	in.
------------	---	------	-----

Sub-basin Volume of Runoff

V360	=	10367	CF
------	---	-------	----

Sub-basin Peak Discharge Rate:

Qp	=	6.1	cfs
----	---	-----	-----

TREATMENT	
-----------	--

A = 0%

B = 0%

C = 8%

D = 92%

Sub-basins 1, 2 and 3 will combine and discharge at the northwest corner of the property. The total discharge of 7.9 cfs will be directed north thru lot 12 to enter Holly Ave. at the proposed public sidewalk culverts (three proposed @ 3.7 cfs each = 11.1 cfs).

#### ORIFICE EQUATION - SIDEWALK CULVERTS

$$Q = C * A * (2 * g * h)^{0.5}$$

Where

Q = 3.7 cfs

C = 0.6

A = 1.334 sq.ft.

g = 32.2 ft/sec<sup>2</sup>

h = 0.333 ft

Available for each 24" x 8" sidewalk culvert (indicating that the opening will function at 60% capacity)

depth of flow at opening from the center of culvert

- Sub-basin 4 consists of the minor landscaping at the southwest corner of the property. This discharge will be directed to a depressed landscaped stilling basin along the west property line. Flow in excess of the basin capacity will continue west along historic flowpath.

SUB-BASIN 4			
Area of basin flows =	6125	SF	= 0.1 Ac.

The following calculations are based on Treatment areas as shown in table

Sub-basin Weighted Excess Precipitation

Weighted E	=	1.44	in.
------------	---	------	-----

Sub-basin Volume of Runoff

V360	=	737	CF
------	---	-----	----

Sub-basin Peak Discharge Rate:

Qp	=	0.5	cfs
----	---	-----	-----

TREATMENT	
-----------	--

A = 0%

B = 45%

C = 25%

D = 30%

# Channel Report

<Name>

Rectangular

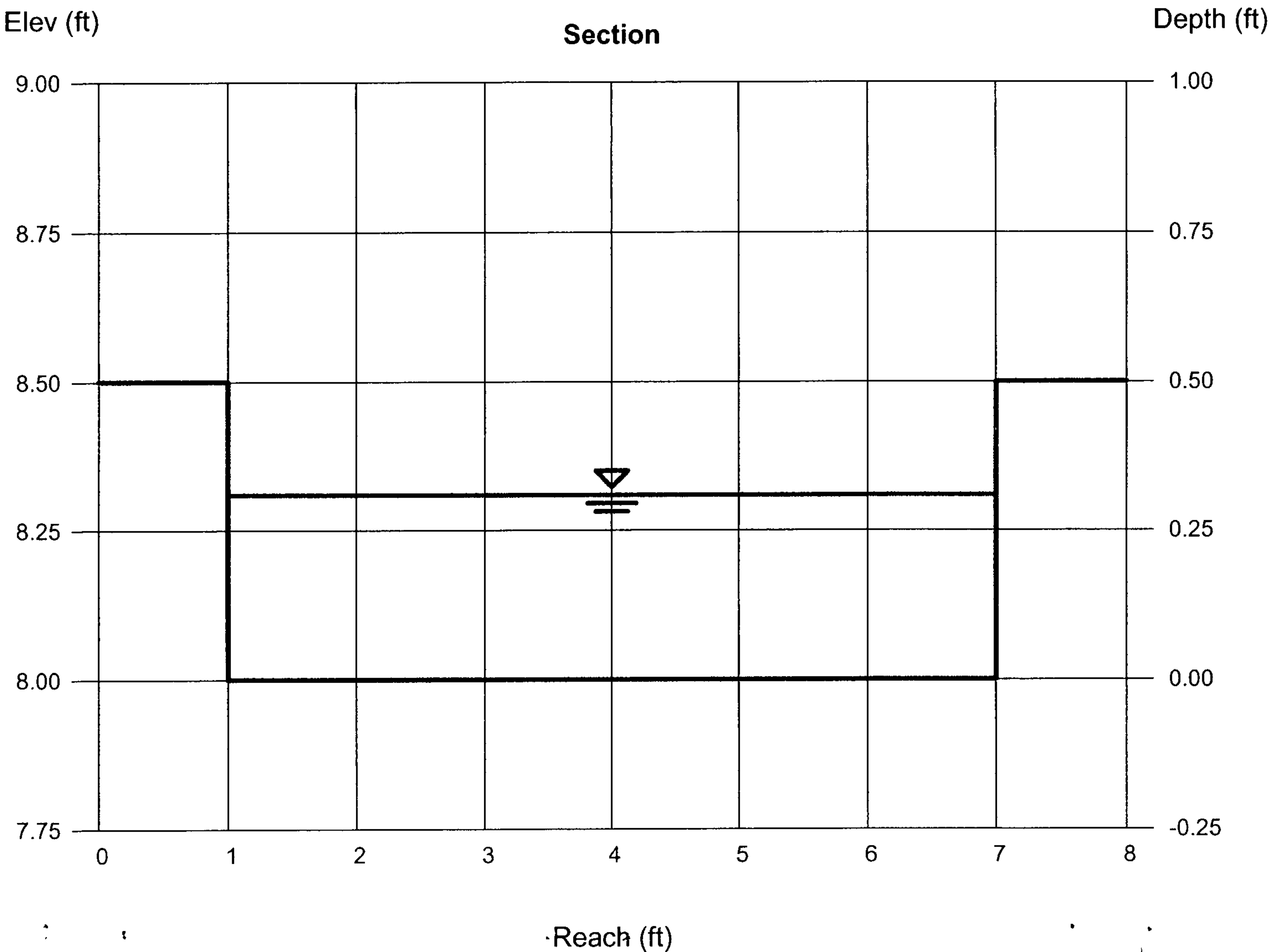
Bottom Width (ft) = 6.00  
Total Depth (ft) = 0.50  
  
Invert Elev (ft) = 8.00  
Slope (%) = 1.11  
N-Value = 0.015

Highlighted

Depth (ft) = 0.31  
Q (cfs) = 7.900  
Area (sqft) = 1.86  
Velocity (ft/s) = 4.25  
Wetted Perim (ft) = 6.62  
Crit Depth, Yc (ft) = 0.38  
Top Width (ft) = 6.00  
EGL (ft) = 0.59

Calculations

Compute by: Known Q  
Known Q (cfs) = 7.90





# CITY OF ALBUQUERQUE



July 7, 2006

Fred C. Arfman, P.E.  
Isaacson & Arfman, P.A.  
128 Monroe St. NE  
Albuquerque, NM 87108

**Re: Paseo Place Commercial Grading and Drainage Plan**  
**Engineer's Stamp dated 6-27-06 (C18/D73)**

Dear Mr. Arfman,

Based upon the information provided in your submittal dated 6-27-06, 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. If you have any questions feel free to call the Municipal Development Department Hydrology Section at 768-3654 (Charles Caruso).

Also, prior to Certificate of Occupancy release, Engineer Certification of the plan referenced above per the DPM checklist will be required.

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

Sincerely,

A handwritten signature in cursive script that reads "Curtis A. Cherne".

Curtis A. Cherne, E.I.  
Engineering Associate, Planning Dept.  
Development and Building Services

3005

C: file  
Charles Caruso, DMD  
Antoinette Baldonado, Excavation and Barricading  
Edward Elwell, Street/Storm Drain Maintenance



**ISAACSON & ARFMAN, P.A.**

**Consulting Engineering Associates**

*Thomas O. Isaacson, PE & LS • Fred C. Arfman, PE  
Scott M. McGee, PE*

June 26, 2006

Curtis A. Cherne, E.I.  
Associate Engineer  
Hydrology Development Section  
Development & Building Services Division  
Planning Department  
City of Albuquerque  
P.O. Box 1293  
Albuquerque, NM 87103

**RE: PASEO PLACE COMMERCIAL GRADING & DRAINAGE PLAN (C18/D73)**

Dear Mr. Cherne:

Included with this submittal are two copies of the revised Grading and Drainage Plan for the above referenced project. Revisions were made per your review comments dated June 22, 2006 as follows:

1. Fire hydrant design location to be moved to north side of storm sewer line on Utility Plan. Note: vertical separation between fireline and storm sewer line is not in conflict.
2. Sump invert corrected.

Please don't hesitate to call with any questions or concerns.

Sincerely,

**ISAACSON & ARFMAN, P.A.**

Fred C. Arfman, PE  
FCA/bjb

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Paseo Place Commercial ZONE MAP / DRG. FILE #: C-18 / D73  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: Lots 12, 13, 20 and 21, Block 18, Tract A, Unit B, North Albuquerque Acres  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Isaacson & Arfman, P.A. CONTACT: Fred Arfman  
ADDRESS: 128 Monroe St. NE PHONE: 268-8828  
CITY, STATE: Albuquerque, NM ZIP CODE: 87108

OWNER: Paseo Place LLC CONTACT: Dan Clemmer  
ADDRESS: 6300 Riverside Plaza Lane NW PHONE: 889-3061  
CITY, STATE: Albuquerque, NM ZIP CODE: 87120

ARCHITECT: George Rainhart & Associates CONTACT: \_\_\_\_\_  
ADDRESS: 2325 San Pedro NE, Suite 2-B PHONE: \_\_\_\_\_  
CITY, STATE: Albuquerque, New Mexico ZIP CODE: 87110

SURVEYOR: Wayjohn Surveying, Inc. CONTACT: Thomas Johnston  
ADDRESS: 330 Louisiana Blvd. NE PHONE: 255-2052  
CITY, STATE: Albuquerque, New Mexico ZIP CODE: 87108

CONTRACTOR: T.B.D. CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1<sup>ST</sup> *REQUIRES TCL or equal*  
☒ DRAINAGE PLAN RESUBMITTAL  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION (HYDROLOGY)  
☐ CLOMR / LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ ENGINEER'S CERTIFICATION (TCL)  
☐ ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN)  
☐ OTHER

## WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES  
☐ NO  
☐ COPY PROVIDED

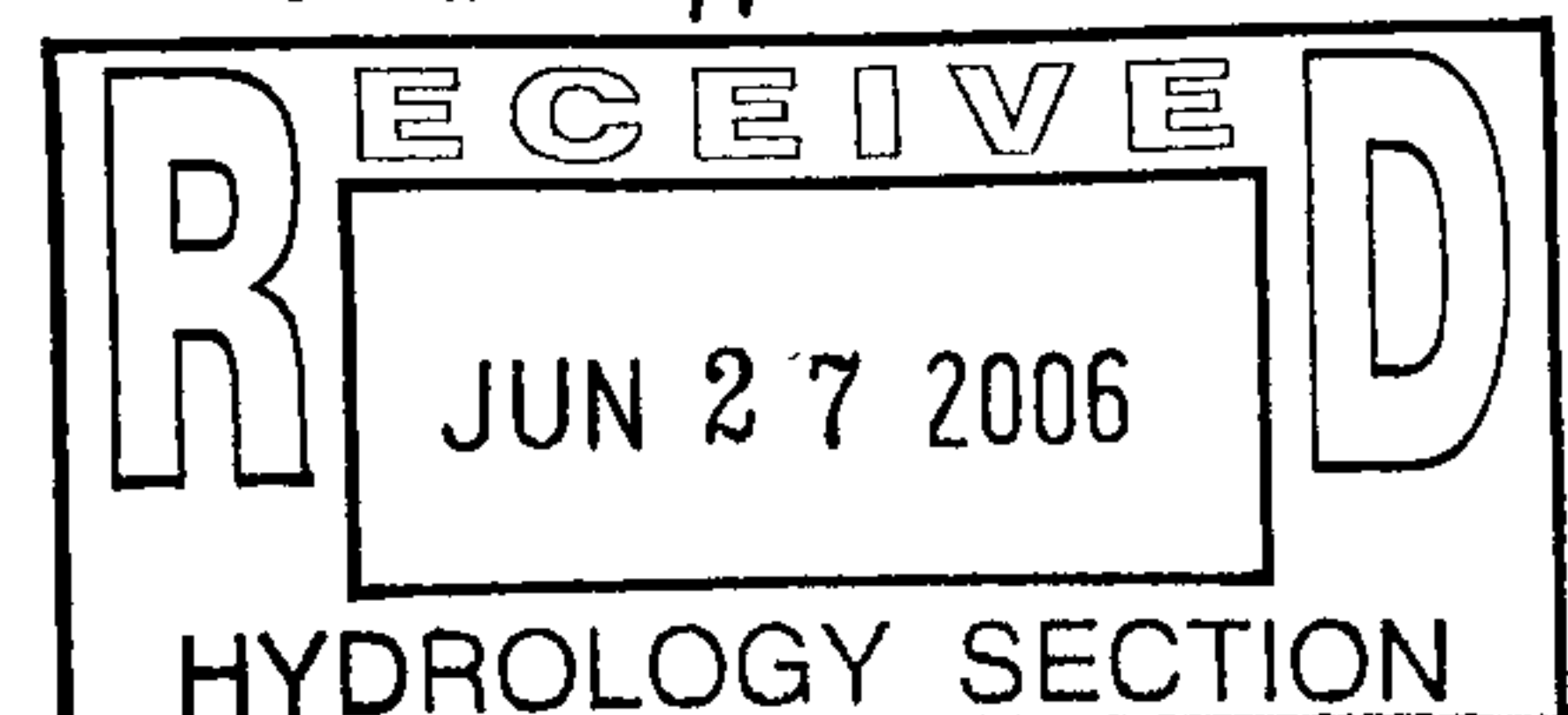
## CHECK TYPE OF APPROVAL SOUGHT:

☐ SIA / FINANCIAL GUARANTEE RELEASE  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D APPROVAL  
☐ S. DEV. PLAN FOR BLDG. PERMIT APPR.  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY (PERM)  
☐ CERTIFICATE OF OCCUPANCY (TEMP)  
☐ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ WORK ORDER APPROVAL  
☒ OTHER *5019 Approval*

DATE SUBMITTED: Tuesday, June 27, 2006 BY: Fred Arfman  
Isaacson & Arfman, P.A.

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 submittal may be required based on the following:

1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five acres and Sector Plans
2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five acres
3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five acres or more.



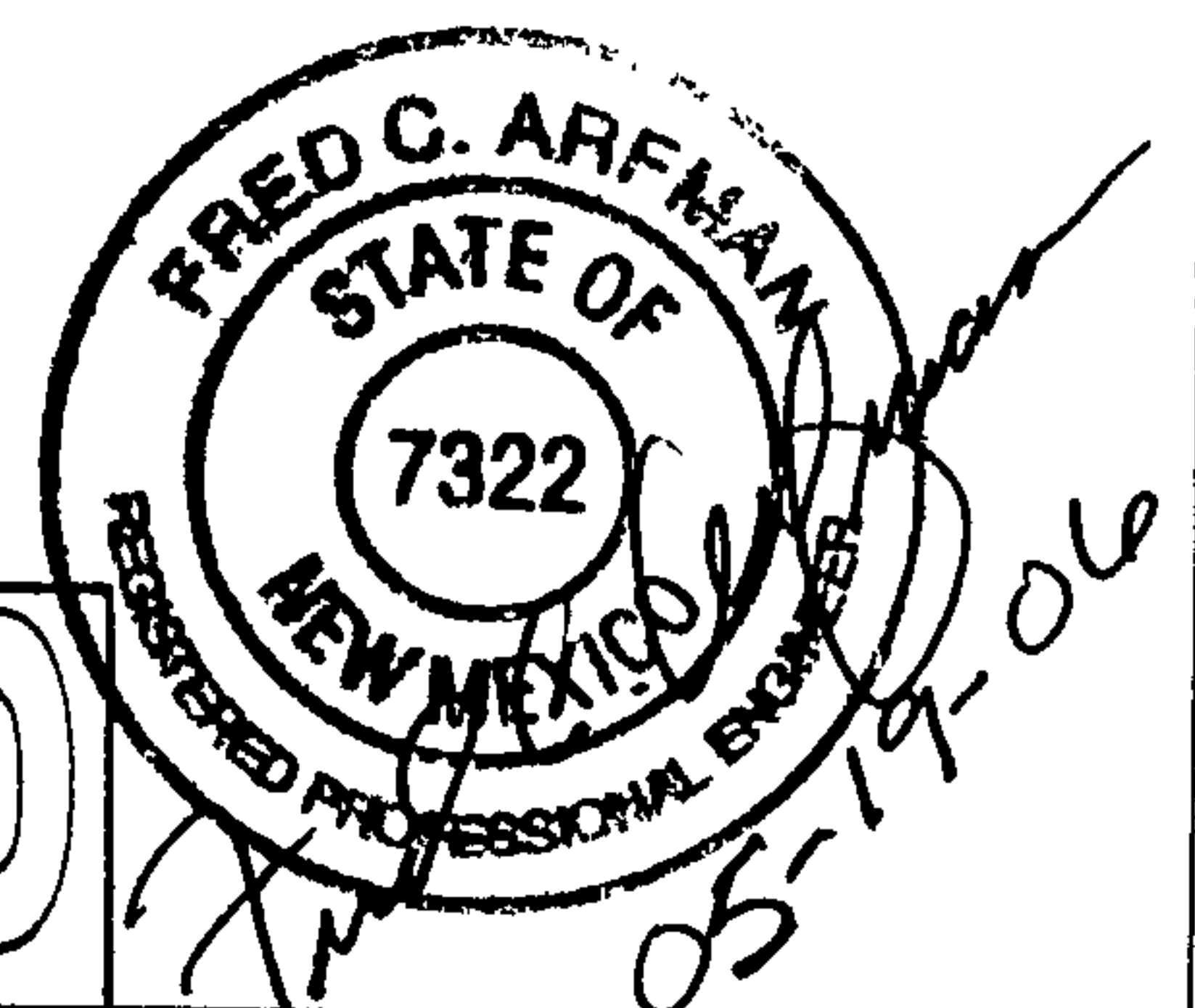
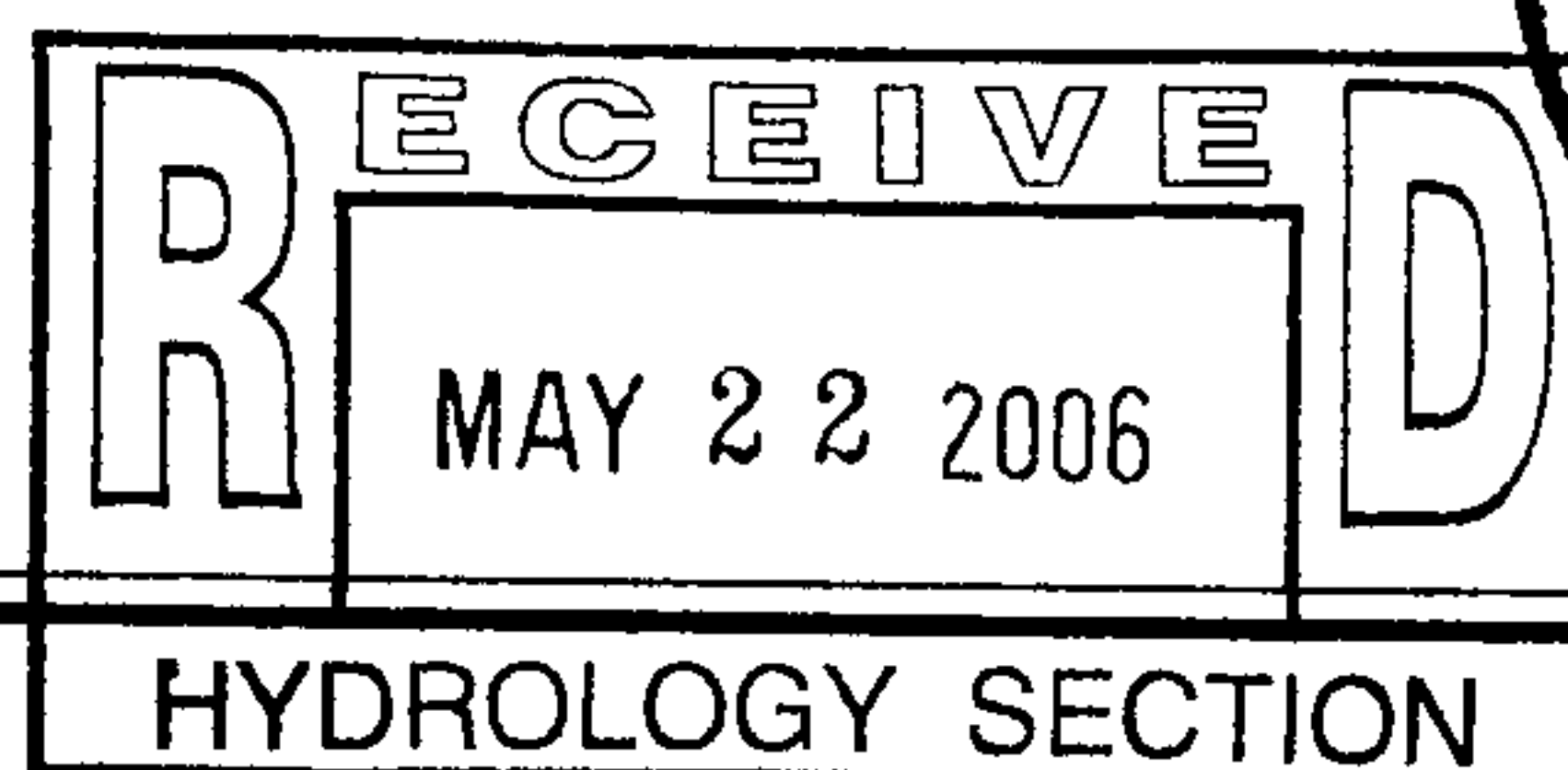
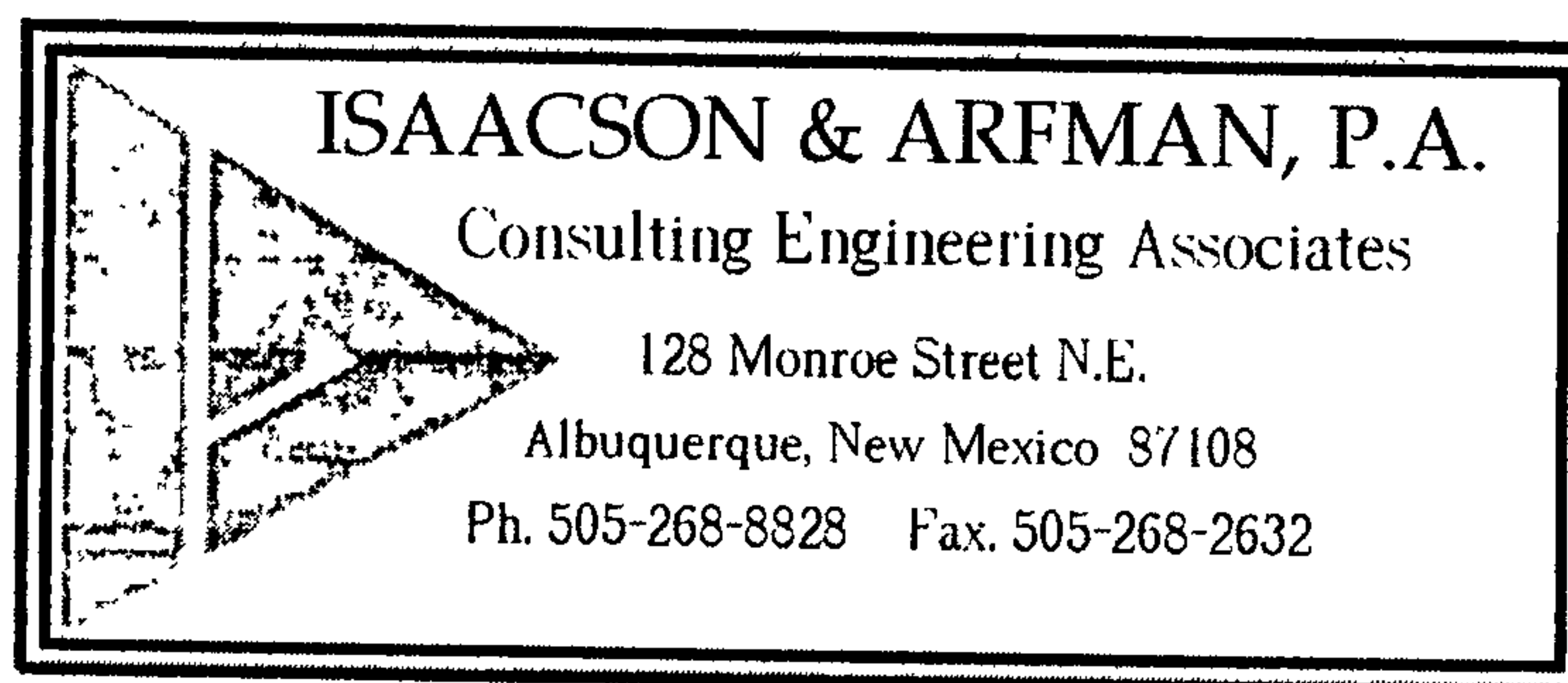
MAY 18, 2006

# SUPPLEMENTAL INFORMATION

FOR

## PASEO PLACE COMMERCIAL

BY





The referenced PROPERTY includes a 3.6 acre site (ON-SITE) and an adjacent 3.5 acre site for a total of 7.1 acres of commercial property located on the south side of Holly Avenue west of San Pedro Blvd. – Zone Atlas Page C-18. Paseo del Norte borders the property to the south, developed commercial property to the east and west and Holly Ave. to the north. The existing site slopes at an average of. 3% to the northwest. It has been previously developed and currently, the majority of the site surface consists of deteriorated asphalt and gravel.

Legal description: Lots 12, 13, 20 and 21 (ON-SITE) and Lots 14, 15, 18 and 19 (ADJACENT) properties.  
BLOCK 18, TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES.

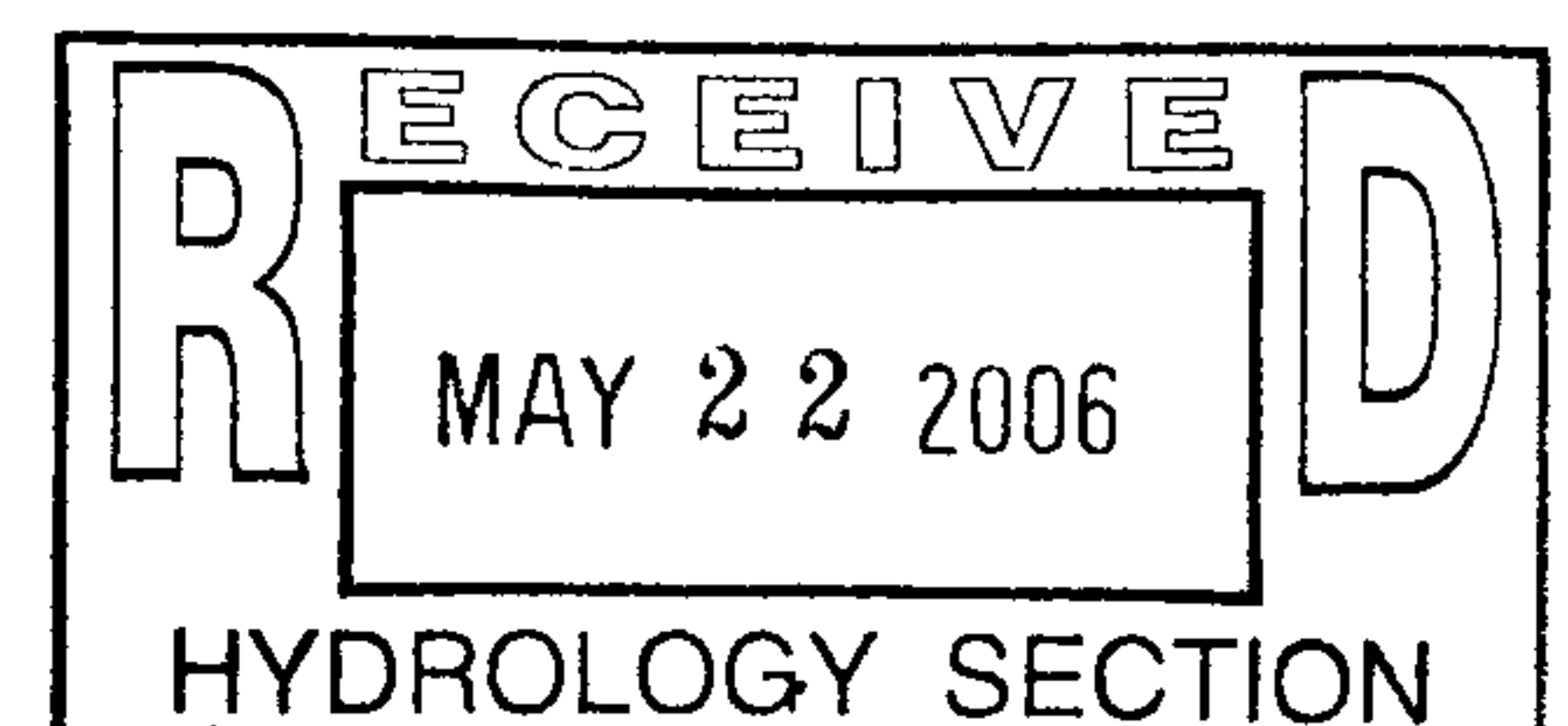
Development: The ON-SITE portion will be developed first. The ADJACENT portion will be rough-graded as part of the ON-SITE development to prepare it for future development.  
Associated cross-lot Access and Drainage Easements will be provided..

The intent of this plan is to show:

- \* Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
- \* The extent of proposed site improvements, including buildings, walks and pavement.
- \* The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet Bernalillo county requirements for drainage management.
- \* The relationship of on-site improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

Pertinent information:

- PROPERTY is located within Floodzone 'X' – 'Areas determined to be outside the 500-year floodplain'..
- No off-site runoff enters the site.



- The PROPERTY was previously developed. Approximately 75% of the PROPERTY consists of deteriorated asphalt and gravel with the remainder hard-packed earth. Per the calculations, the pre-existing discharge is 32.7 cfs.

		EXISTING STATE	
Area of PROPERTY	307534	SF	= 7.1 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)			
Weighted E	=	2.09 in.	
Sub-basin Volume of Runoff (see formula above)			
V360	=	53626 CF	
Sub-basin Peak Discharge Rate: (see formula above)			
Qp	=	32.7 cfs	

TREATMENT	
A =	0%
B =	0%
C =	25% = 6.125
D =	75% = 26.7

*Handwritten notes: 1.78 ac, D = 5.33 ac*

- ~~SAD #224~~, developed for Holly Avenue and approved in 1998 states that flows from PROPERTY can have free discharge to Holly Ave. (based on assumed developed land treatments of 10%A, 15%B, 10%C, 65%D). Total allowable discharge rate is 29.5 cfs. *29.7*

		ALLOWABLE DISCHARGE PER SAD #224	
Area of PROPERTY	307534	SF	= 7.1 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)			
Weighted E	=	1.87 in.	
Sub-basin Volume of Runoff (see formula above)			
V360	=	47847 CF	
Sub-basin Peak Discharge Rate: (see formula above)			
Qp	=	29.5 cfs	

TREATMENT	
A =	10%
B =	15%
C =	10%
D =	65%

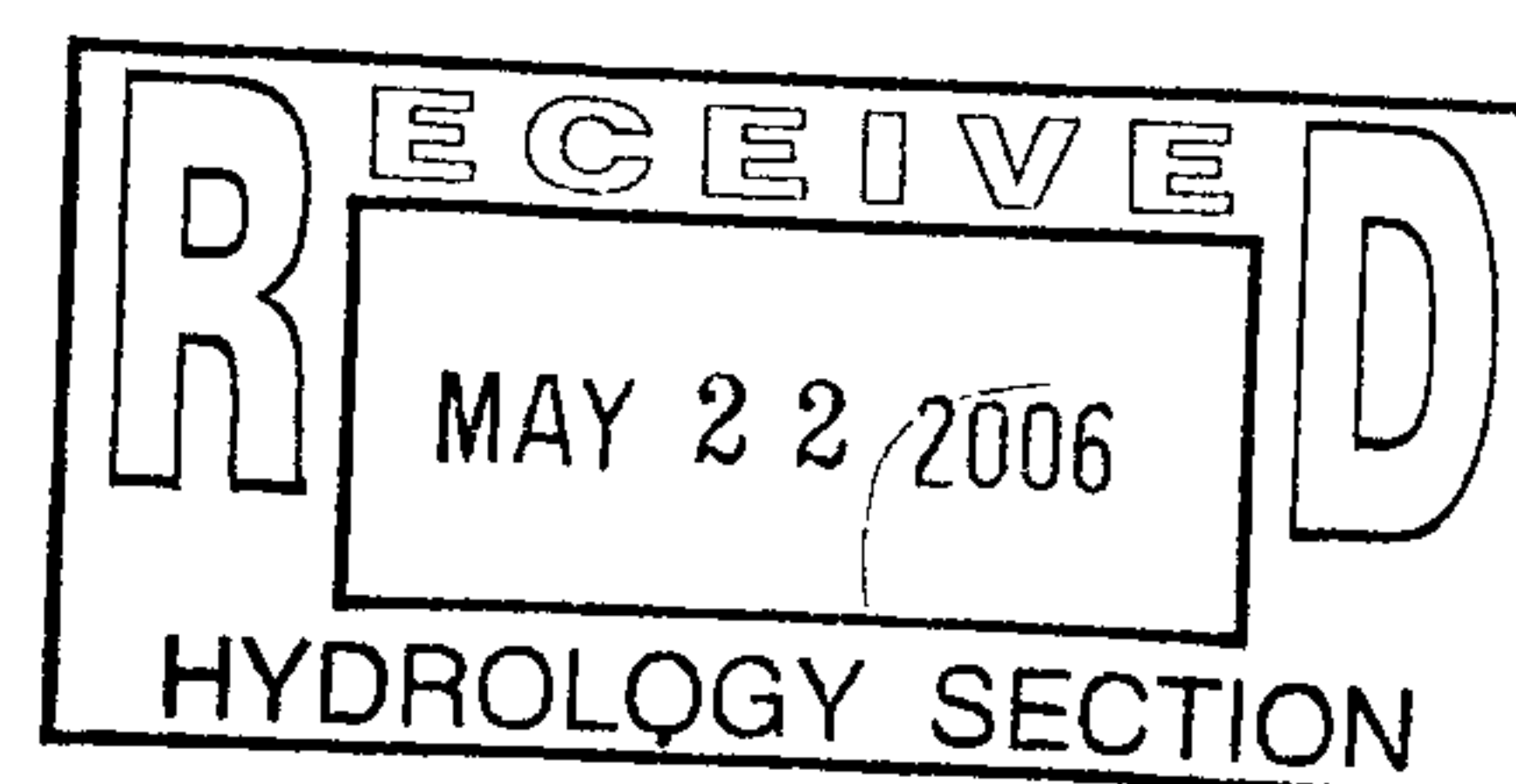
*Handwritten notes: 1.320, 2.769, 2.450, 23.167*

- The fully developed PROPERTY (ON-SITE and ADJACENT), estimating actual land treatment values of 0%A, 10%B, 5%C and 85%D will generate 33.2 cfs.

		PROPOSED DEVELOPED STATE	
Area of PROPERTY	307534	SF	= 7.1 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)			
Weighted E	=	2.16 in.	
Sub-basin Volume of Runoff (see formula above)			
V360	=	55420 CF	
Sub-basin Peak Discharge Rate: (see formula above)			
Qp	=	33.2 cfs	

TREATMENT	
A =	0%
B =	10% = 1.846
C =	5% = 1.725
D =	85% = 30.295

*Handwritten calculations:*  
 33.2 - 29.7 = 3.5 cfs  
 6.125



# PROPOSED SOLUTION:

The fully developed PROPERTY will consist of three (3) drainage sub-basins (SUB-BASINS exhibit).

Basin 1, consisting of the majority of the east property will generate 14.6 cfs. This flow will pass to the proposed east detention ponding area. An inlet with a 12" dia. pond drain will pass a maximum of 3.64 cfs to the west detention ponding area. The discharge in excess of the pond capacity will overflow and pass to the west property to join the Basin 2 flow. For the future development of the east property, a detention pond will be required to ensure the allowable discharge rate is adhered to. Maximum discharge to Sub-Basin 2 = 14.6 cfs - 3.6 cfs = 11.0 cfs. - *future*

SUB-BASIN 1		DRAINING TO ADJACENT PROPERTY POND			
Area of basin flows =	136670	SF	=	3.1	Ac.
The following calculations are based on Treatment areas as shown in table to the right					
Sub-basin Weighted Excess Precipitation (see formula above)					
Weighted E	=	2.14	in.	TREATMENT <sup>h</sup>	
Sub-basin Volume of Runoff (see formula above)					
V360	=	24418	CF	A = 0%	
Sub-basin Peak Discharge Rate: (see formula above)				B = 15%	
Qp	=	14.6	cfs	C = 0%	
				D = 85%	

$$E = .65(.5) + .15(.5)$$

*E = .85 ( ) + .15 ( )*

TREATMENT	
A =	0%
B =	15%
C =	0%
D =	85%

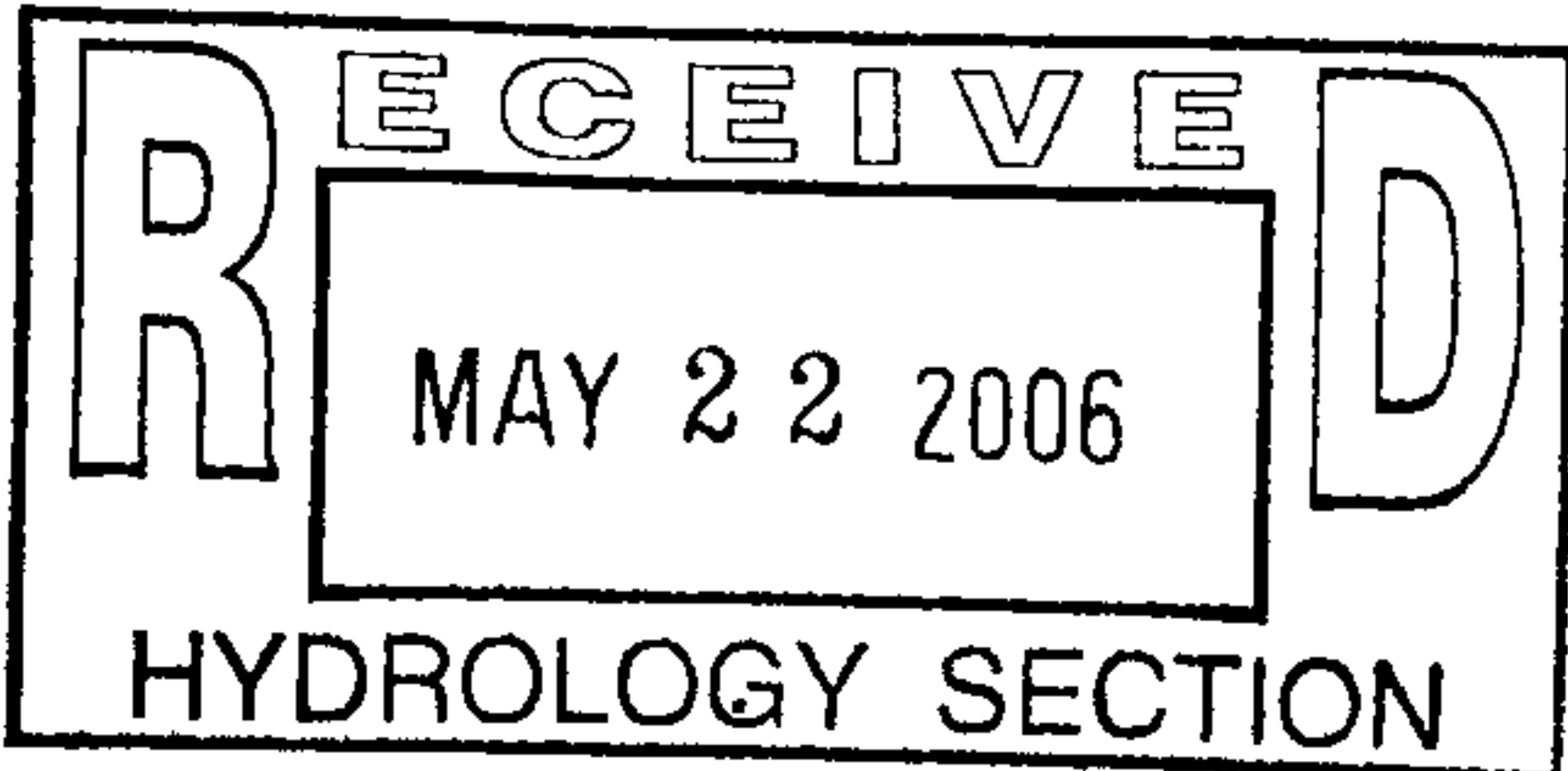
Basin 2, consisting of the majority of the west property will generate 16.2 cfs to be released directly to Holly Ave. at the west access drive. The total free discharge to Holly Ave. will be 16.2 cfs + 11.0 cfs = 27.2 cfs.

SUB-BASIN		2	FREE DISCHARGE TO HOLLY AVE			
Area of basin flows =		147645	SF	=	3.4	Ac.
The following calculations are based on Treatment areas as shown in table to the right						
Sub-basin Weighted Excess Precipitation (see formula above)						
Weighted E		=	2.22	in.	TREATMENT	
Sub-basin Volume of Runoff (see formula above)						
V360		=	27265	CF	A = 0%	
Sub-basin Peak Discharge Rate: (see formula above)						
Qp		=	16.2	cfs	B = 10%	
C = 0%						
D = 90%						

TREATMENT	
A =	0%
B =	10%
C =	0%
D =	90%

*Q<sub>M1</sub> = 27.9 cfs*  
*basin 1 = 14.6 cfs*  
*basin 2 = 16.2*  
*basin 3 = 2.1*  
*32.9 cfs ≠ 33.2 cfs on other pg*

*Q<sub>pnp</sub> basin 1 → basin 3 3.64 14.6*  
*basin 2 = 16.2 cfs*  
*basin 3 = 2.1 cfs*  
*10.3 = 9.6 cfs not 11 cfs*





Basin 3, consisting of the roof discharge from the southwest building as well as the west landscaped area, will be detained.

SUB-BASIN 3		DRAINING TO PROPOSED POND	
Area of basin flows =	22795 SF	=	0.5 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)		TREATMENT	
Weighted E	= 1.75 in.	A =	0%
Sub-basin Volume of Runoff (see formula above)		B =	20%
V360	= 3326 CF	C =	30%
Sub-basin Peak Discharge Rate: (see formula above)		D =	50%
Qp	= 2.1 cfs		

Along with the 3.6 cfs from the Sub-Basin 1 storm drain, the total discharge to the proposed west ponding area is (2.1 cfs + 3.6 cfs) 5.7 cfs. This Flow will be released to Holly Ave. at a controlled rate not to exceed:

Total Allowable	Sub-Basin 1 and 2 Free Discharge	Discharge from Sub-Basin 3
29.5 cfs	26.2 cfs $- 16.2 \text{ (basin 2)} = 10$	3.3 cfs

A proposed 1' wide x 6" high opening in the proposed pond retaining wall at the pond flowline (05.5) will release flow at a rate of 2.1 cfs to a 2' wide covered sidewalk culvert at the northwest corner of the property.

ORIFICE EQUATION - POND OUTLET TO HOLLY AVENUE NE

The Orifice Equation is used to calculate the Flow at the opening of a Channel

$Q = C \cdot A \cdot (2 \cdot g \cdot h)^{0.5}$

Where	Q	=	2.1 ✓ cfs	
	C	=	0.6	(indicating that the opening will function at 60% capacity)
	A	=	0.5 sq.ft.	2' wide x 8" high clear opening 6" x 1' wide
	g	=	32.2 ft/sec <sup>2</sup>	
	h	=	0.75 ft	depth of flow at opening from the center of culvert

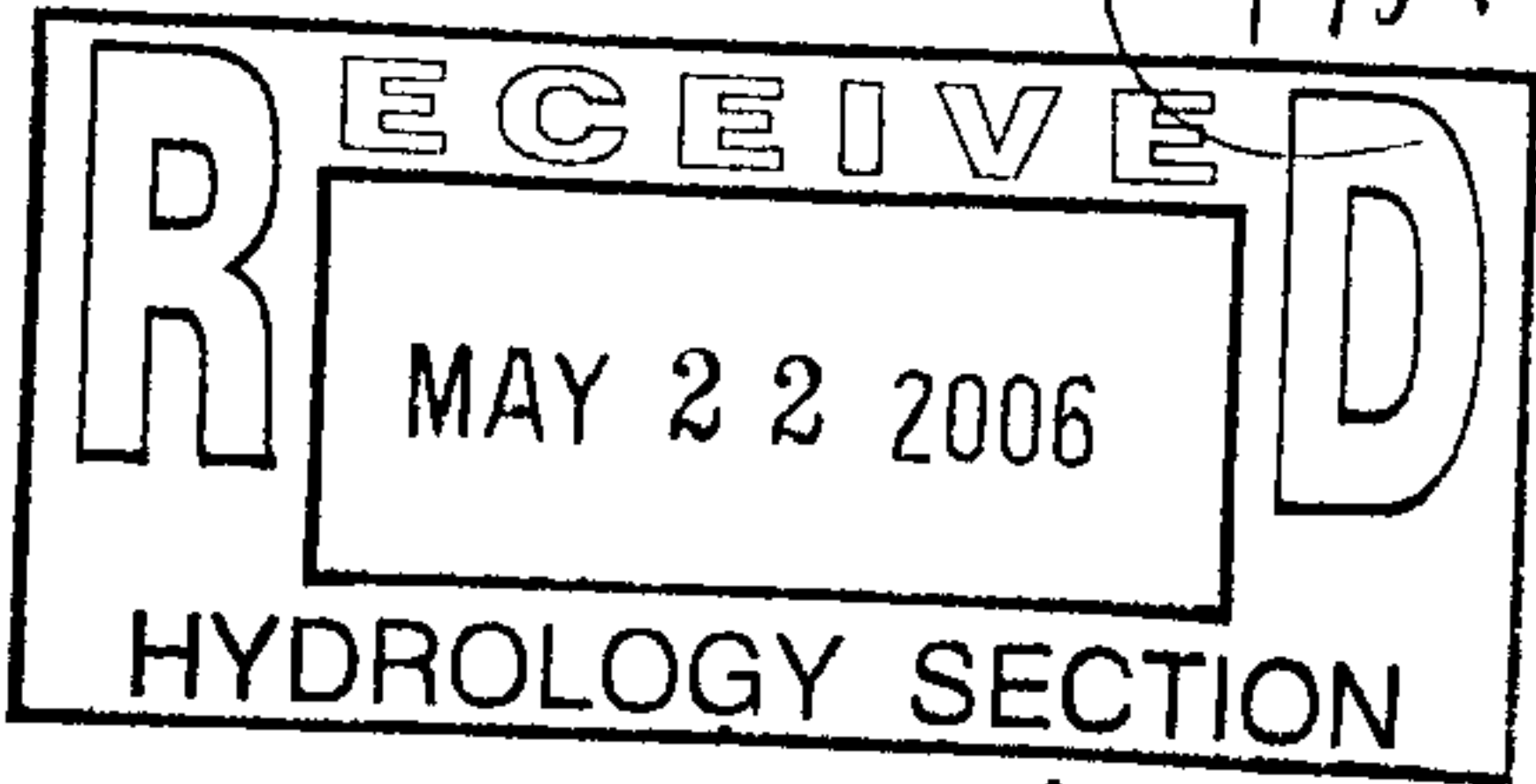
Per the hydrograph calculations, the west pond is required to detain a volume of 4,083.0 cf.

Pond calculations show the proposed pond, at a depth of 18", has a volume of 4,440 CF > 4,083 CF

West

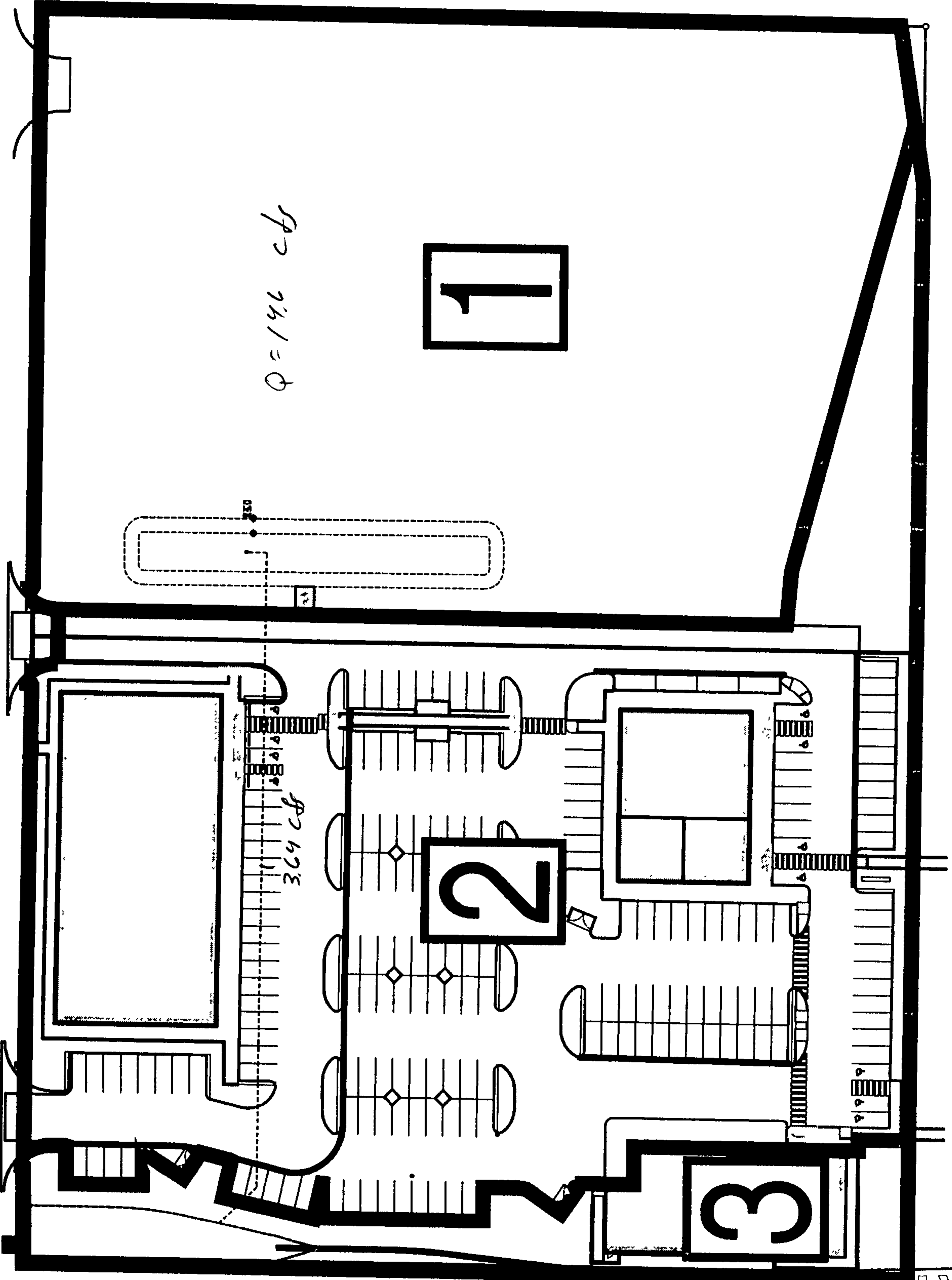
POND #1		
Contour	Area	Volume
5207.00	4950	
5206.00	2620	3785 CF
5205.50	0	655 CF
TOTAL VOL.		4440 CF

Capacity for basin 1

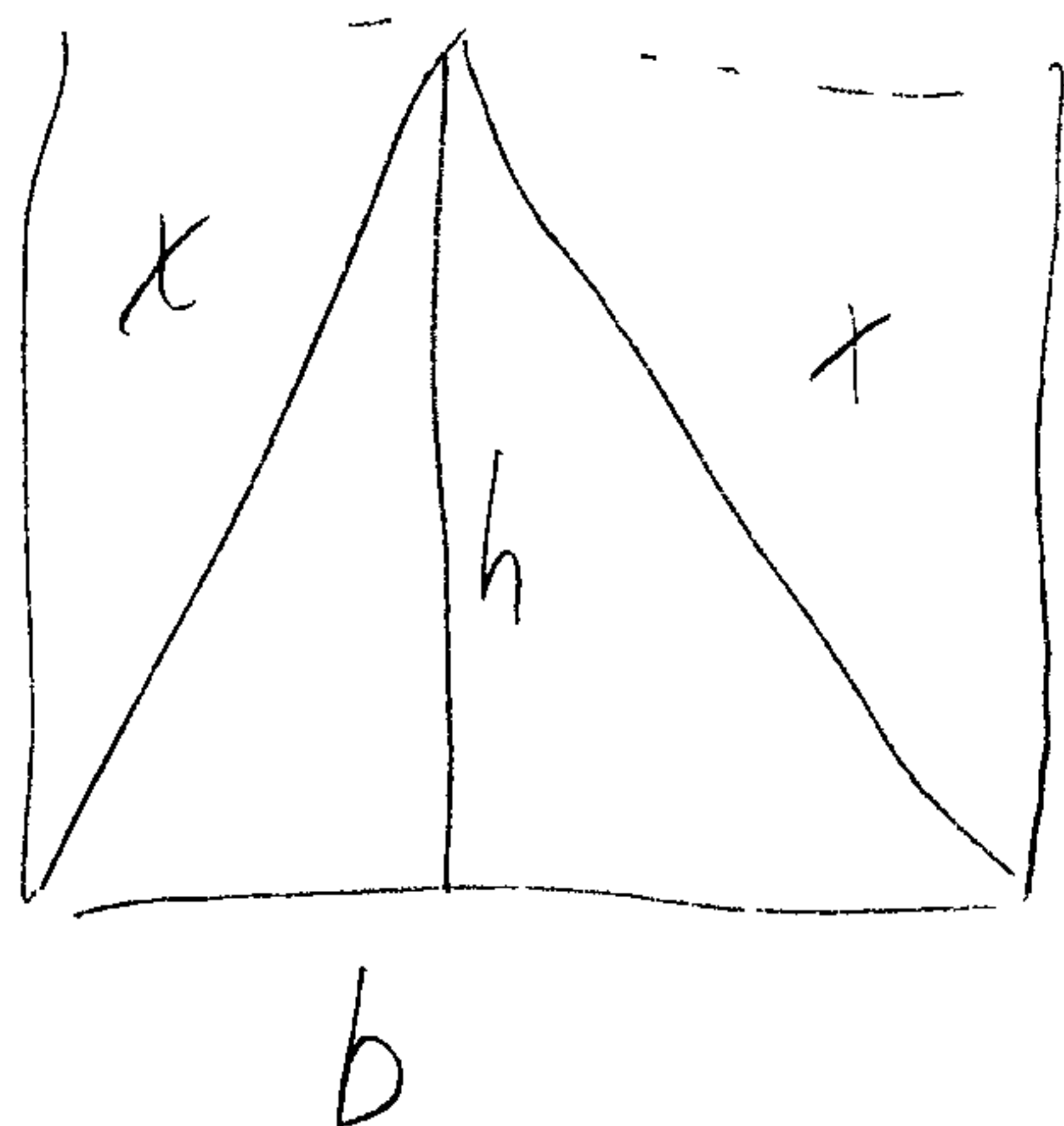




# SUB-BASINS



RECEIVED  
MAY 22 2006  
HYDROLOGY SECTION

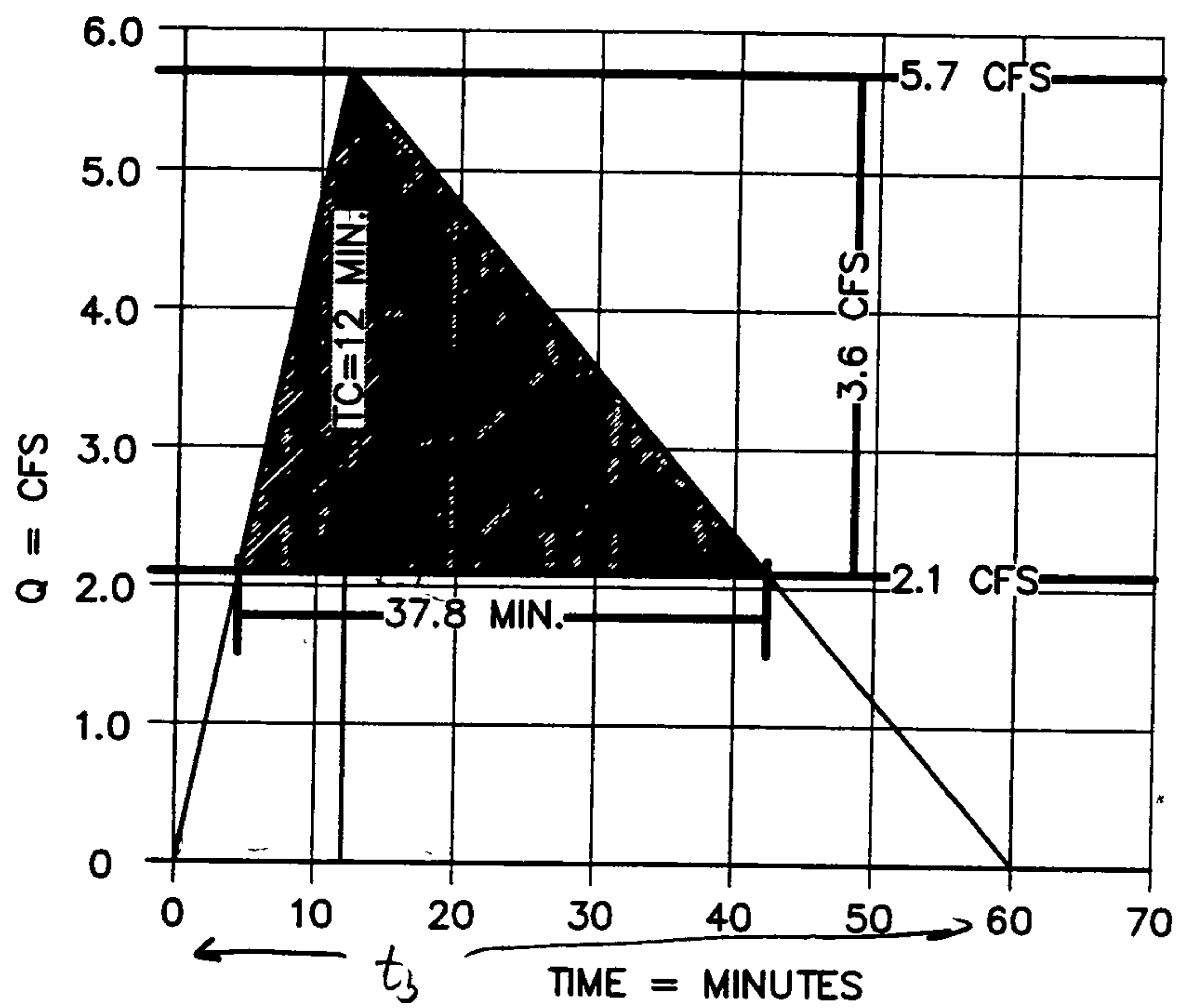


A  $\frac{1}{2} b h$

RECEIVED  
MAY 22 2006  
HYDROLOGY SECTION

17th

**VOLUME TO BE  
STORED = 4083 CF**



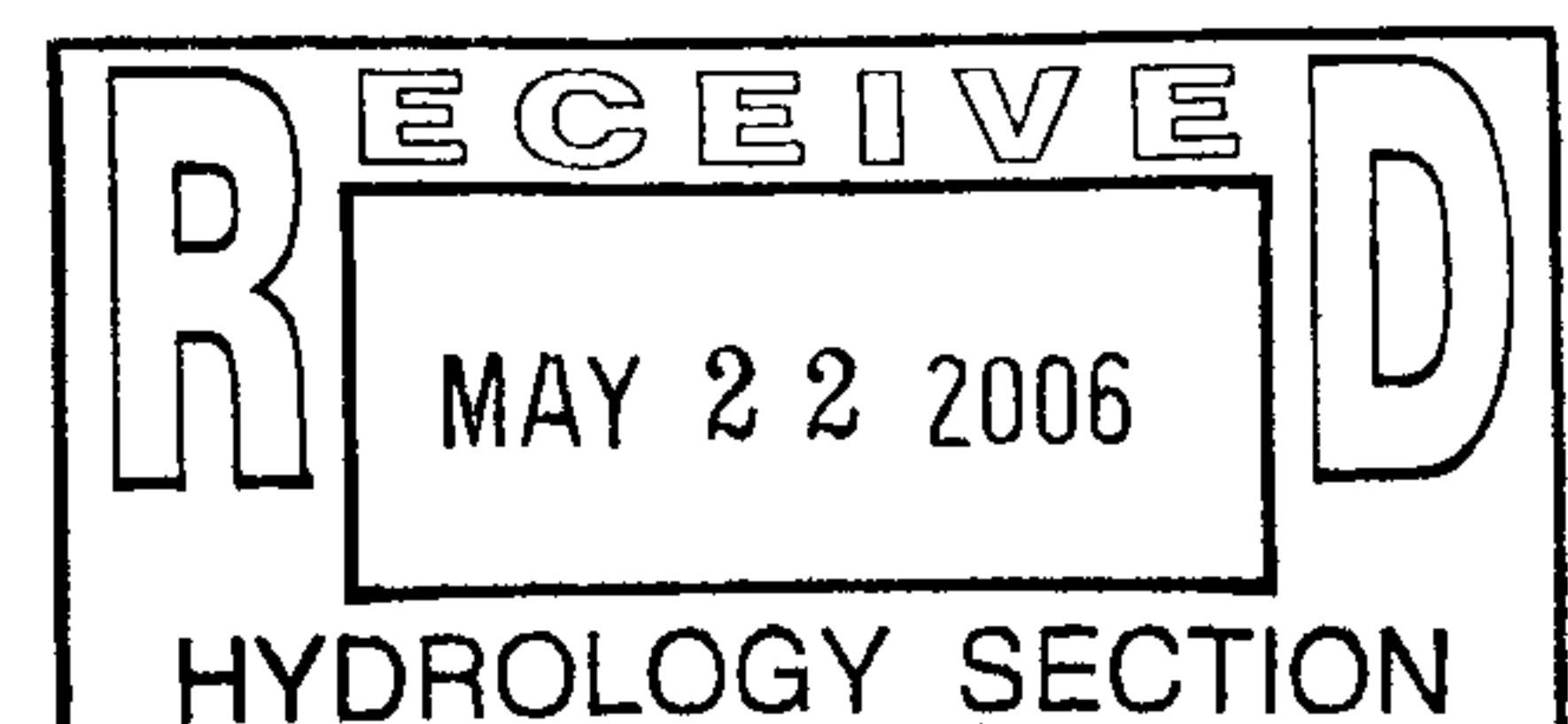
# WEST POND HYDROGRAPH

12" diameter pipe  
Worksheet for Circular Channel

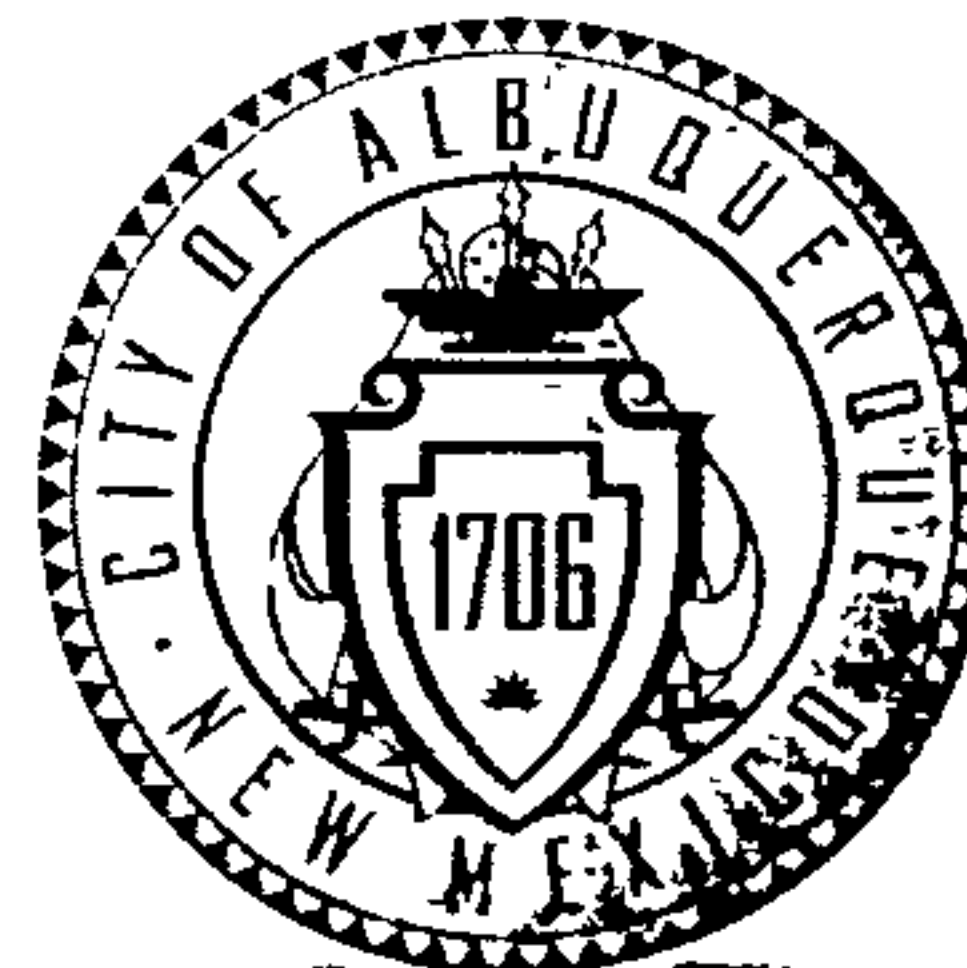
Project Description	
Project File	c:\haestad\academic\fmw\1435.fm2
Worksheet	Off-site Pond discharge to on-site pond
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Full Flow Capacity

Input Data	
Mannings Coefficient	0.009
Channel Slope	0.005000 ft/ft
Diameter	12.00 in

Results		
Depth	1.00	ft
Discharge	3.64	cfs
Flow Area	0.79	ft <sup>2</sup>
Wetted Perimeter	3.14	ft
Top Width	0.00	ft
Critical Depth	0.81	ft
Percent Full	100.00	
Critical Slope	0.005067	ft/ft
Velocity	4.63	ft/s
Velocity Head	0.33	ft
Specific Energy	FULL	ft
Froude Number	FULL	
Maximum Discharge	3.91	cfs
Full Flow Capacity	3.64	cfs
Full Flow Slope	0.005000	ft/ft



# CITY OF ALBUQUERQUE



**Planning Department  
Transportation Development Services Section**

July 20, 2011

John Douglas Heller, Registered Architect.  
Mullen Heller Architecture P.C.  
924 Park Avenue SW, Ste. B  
Albuquerque, NM 87102

Re: Certification Submittal for a Permanent Building Certificate of Occupancy (C.O.)  
for After Hours Pediatrics, [C-18 / D073]  
- 5904 Holly NE  
Architect's Stamp Dated 07/19/11

Dear Mr. Heller:

Based upon the information provided in your submittal received 07-19-11,  
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.

Sincerely,

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

cc: Engineer  
Hydrology file  
CO Clerk



# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

C-18/DO73

PROJECT TITLE: After Hours Pediatrics ZONE MAP/DRG. FILE #: ~~C-18-Z~~  
DRB #: 100841/10drb70197 EPC#: \_\_\_\_\_ WORK ORDER#: N/A

LEGAL DESCRIPTION: Lot 21, Block 18, Unit B, Subdivision: North Albuquerque Acres  
CITY ADDRESS: 5904 Holly Avenue NE, Albuquerque, NM 87113

ENGINEERING FIRM: Goodwin & Associates  
ADDRESS: PO Box 90606  
CITY, STATE: Albuquerque, NM

CONTACT: Greg Krenik  
PHONE: 505 828 2200  
ZIP CODE: 97199

OWNER: Tripletta L.L.C  
ADDRESS: 59201 Montgomery Blvd. NE  
CITY, STATE: Albuquerque, NM

CONTACT: Bill Hawk  
PHONE: 505-379-2674  
ZIP CODE: 87111

ARCHITECT: Mullen Heller Architecture P.C  
ADDRESS: 924 Park Avenue SW, Suite B  
CITY, STATE: Albuquerque, NM

CONTACT: Doug Heller  
PHONE: 505-268-4144  
ZIP CODE: 87102

SURVEYOR: Surv-Tek, Inc.  
ADDRESS: 9384 Valley View Drive  
CITY, STATE: Albuquerque, NM

CONTACT: Rusty Hugg  
PHONE: 505-897-3366  
ZIP CODE: 87114

CONTRACTOR: Wilger Enterprises  
ADDRESS: 425 Edmon NE  
CITY, STATE: Albuquerque, NM

CONTACT: Scot Mclelland  
PHONE: 505 345 2854  
ZIP CODE: 87107

## CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL, **REQUIRES TCL or equal**
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☒ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

## CHECK TYPE OF APPROVAL SOUGHT:

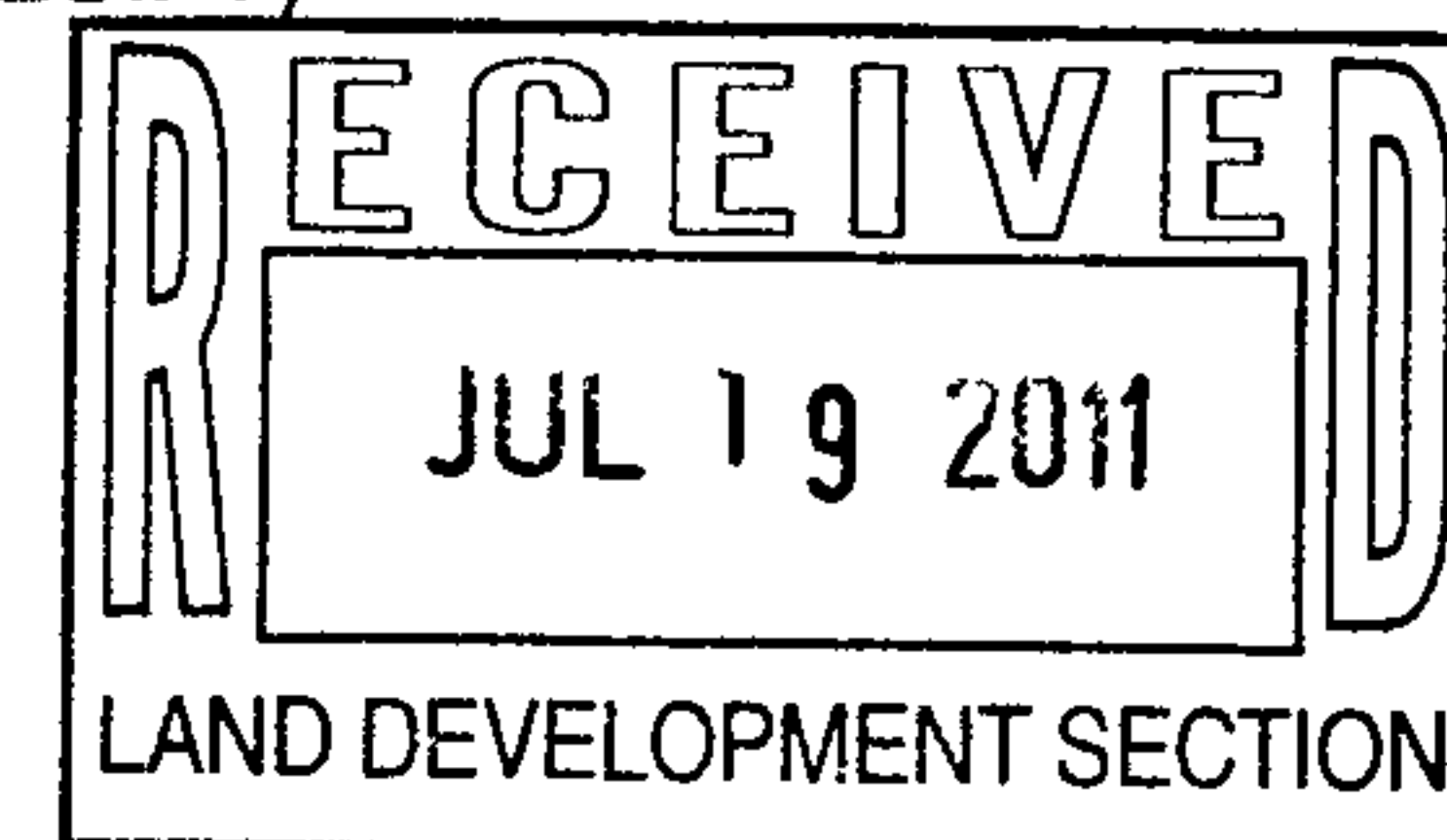
- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☒ CERTIFICATE OF OCCUPANCY (PERM.)
- ☐ CERTIFICATE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

## WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
- ☒ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: July 20, 2011

BY: Doug Heller



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 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 subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

July 20, 2011

Mr. Nilo Salgado-Fernandez, PE  
Senior Traffic Engineer  
Development and Building Services  
Planning Department  
City of Albuquerque  
600 2<sup>nd</sup> Street NW.  
Albuquerque, NM 87102

Re: **Permanent Certificate of Occupancy for After Hours Pediatrics, 5904 Holly Ave NE,  
Albuquerque, NM 87113**

Dear Nilo:

I, Douglas Heller, NMRA of Mullen Heller Architecture P.C., hereby certify that this project is in substantial compliance with and in accordance with the design intent of the DRB site plan (DRB Project #:1008401) approved August, 2010. I further certify that I have personally visited the project site on July 13, 2011 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 Engineer's Certification (DRB Approved Site Plan) for Permanent Certificate of Occupancy.

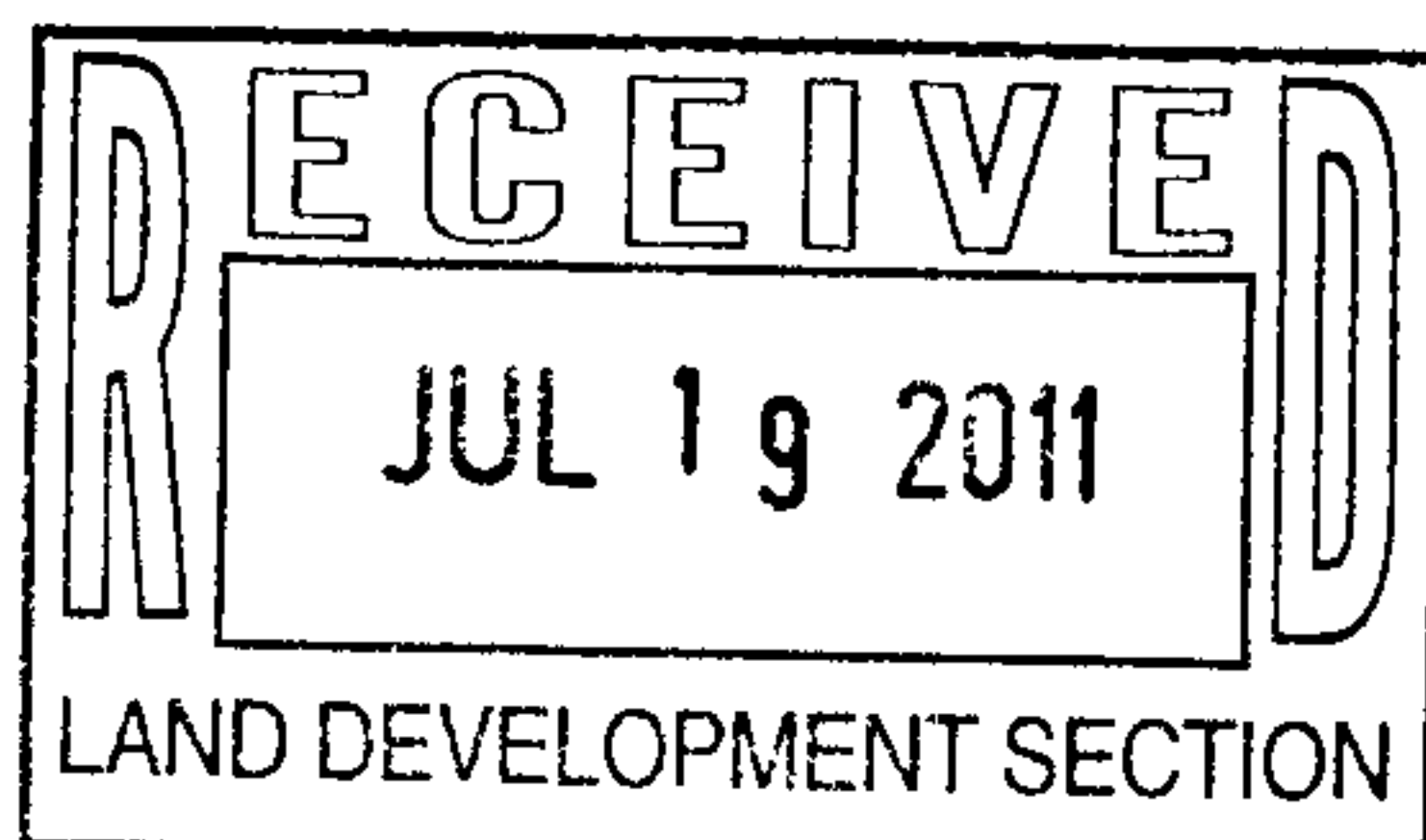
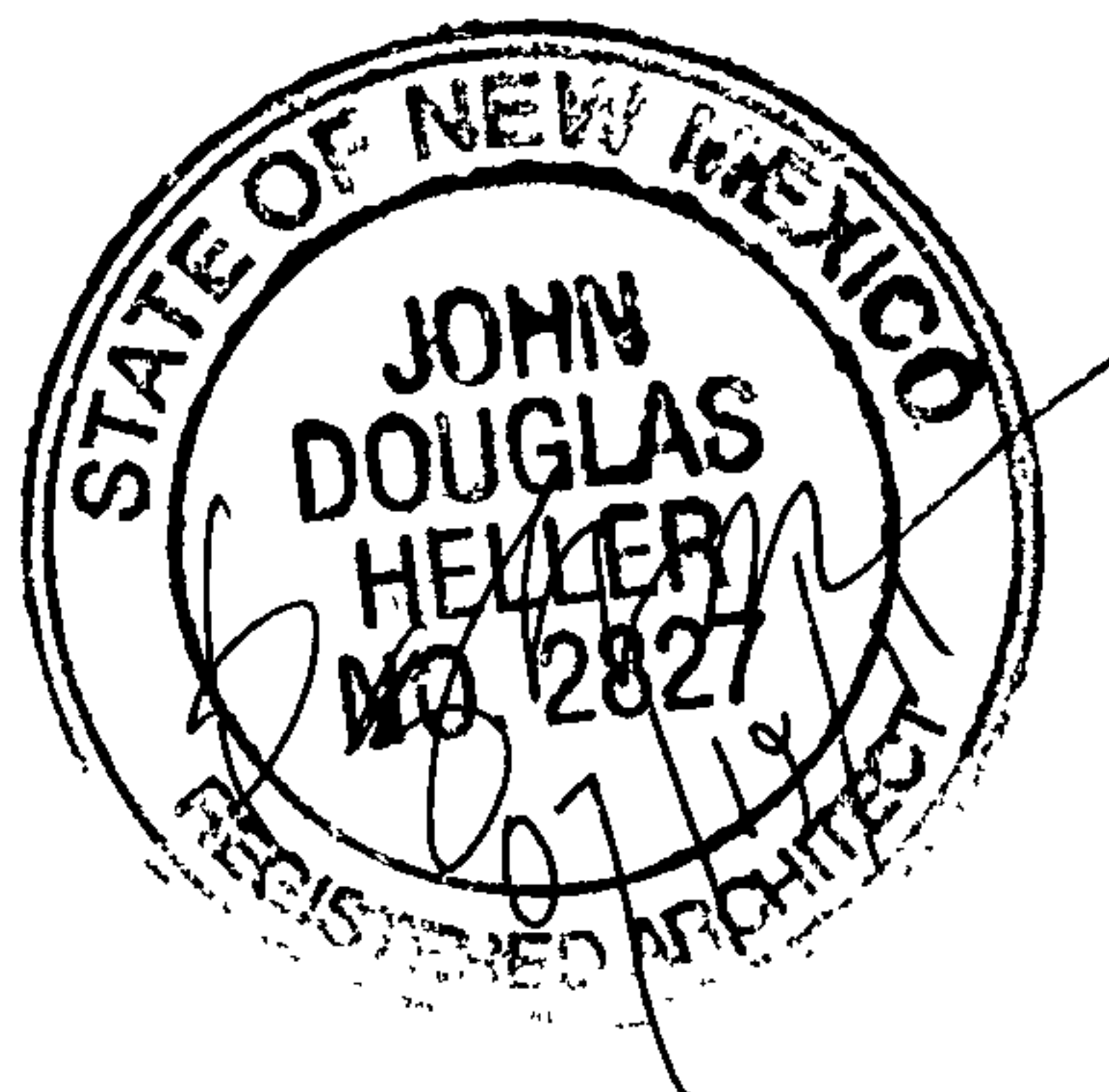
The record information presented herein is not necessarily complete and intended only to verify substantial compliance of the traffic aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Please feel free to contact me if you have any questions.

Sincerely,  
**Mullen Heller Architecture PC**

Douglas Heller, AIA

Attachment: DRB Approved Site Plan.



# CITY OF ALBUQUERQUE



July 16, 2010

Gregory J. Krenik, P.E.  
Mark Goodwin & Associates, PA  
P.O. Box 90606  
Albuquerque, NM 87199

**Re: Pediatric Clinic-Paseo Del Norte, Conceptual grading Plan  
Engineer's Stamp date 7-8-10 (C18/D073)**

Dear Mr. Krenik,

Based upon the information provided in your submittal received 7-13-10, the above referenced plan is approved for Site Plan for Building Permit action by the DRB.

You may want to contact NMDOT to grade in their ROW.

The Building Permit submittal should accurately depict the existing grades. There are stockpiles on Lots 12 and 13 that may impact proposed improvements.

Sincerely,

Curtis A. Cherne, P.E.  
Senior Engineer, Planning Dept.  
Development and Building Services

C: file  
Brad Bingham



**DRAINAGE AND TRANSPORTATION INFORMATION SHEET**  
(Rev. 12/05)

PROJECT TITLE: After Hours Pediatrics ZONE MAP/DRG. FILE # C-18 10023  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: Lot 21, Block 18, Tract A, Unit B, NAA  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Mark Goodwin & Associates, PA CONTACT: Gregory J. Krenik  
ADDRESS: P.O. Box 90606 PHONE: 828-2200  
CITY, STATE: Albuquerque, NM ZIP CODE: 87199

OWNER: After Hours Pediatrics CONTACT: Dr. Bill Hawk  
ADDRESS: 9201 Montgomery Blvd. NE PHONE: 298-2505  
CITY, STATE: Albuquerque, NM ZIP CODE: 87111

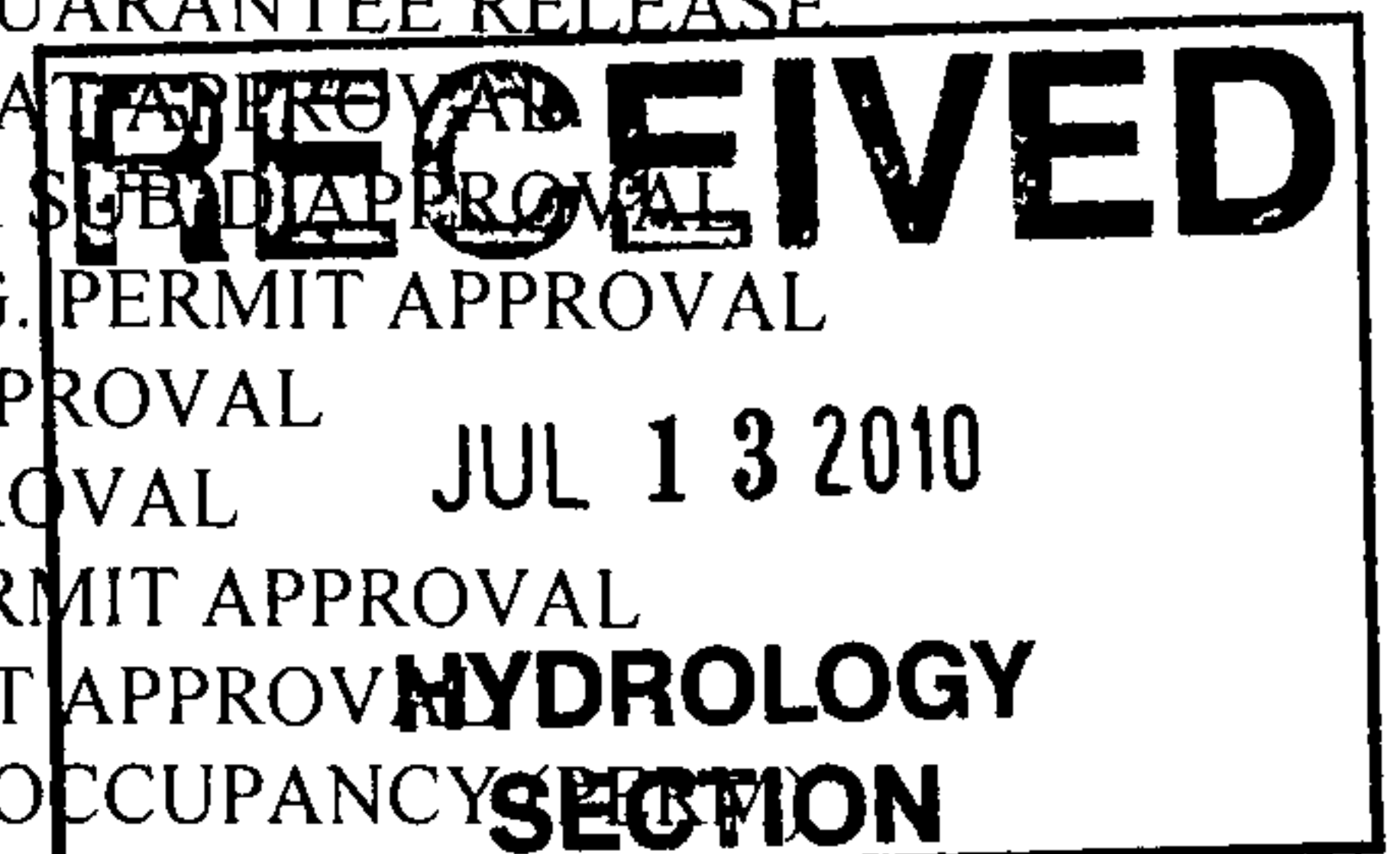
ARCHITECT: Mullen Heller Architecture CONTACT: Mike Madden  
ADDRESS: 924 Park Ave. SW, Suite B PHONE: 268-4144  
CITY, STATE: Albuquerque, NM ZIP CODE: 87102

SURVEYOR: WayJohn Surveying, Inc. CONTACT: Tim Johnson  
ADDRESS: 330 Louisiana Blvd. NE PHONE: 255-2052  
CITY, STATE: Albuquerque, NM ZIP CODE: 87108

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

TYPE OF SUBMITTAL:  
☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL  
☐ DRAINAGE PLAN RESUBMITTAL  
☒ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERT (HYDROLOGY)  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT  
☐ ENGINEER/ARCHITECT CERT (TCL)  
☐ ENGINEER/ARCHITECT (DRB SITE PLAN)  
☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:  
☐ SIA/FINANCIAL GUARANTEE RELEASE  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUBDIVISION APPROVAL  
☒ S. DEV. FOR BLDG. PERMIT APPROVAL  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☐ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY (TEMP)  
☐ CERTIFICATE OF OCCUPANCY (PERM)  
☐ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ WORK ORDER APPROVAL  
☐ OTHER (SPECIFY) 00



WAS A PRE-DESIGN CONFERENCE ATTENDED:  
☒ YES  
☐ NO  
☐ COPY PROVIDED

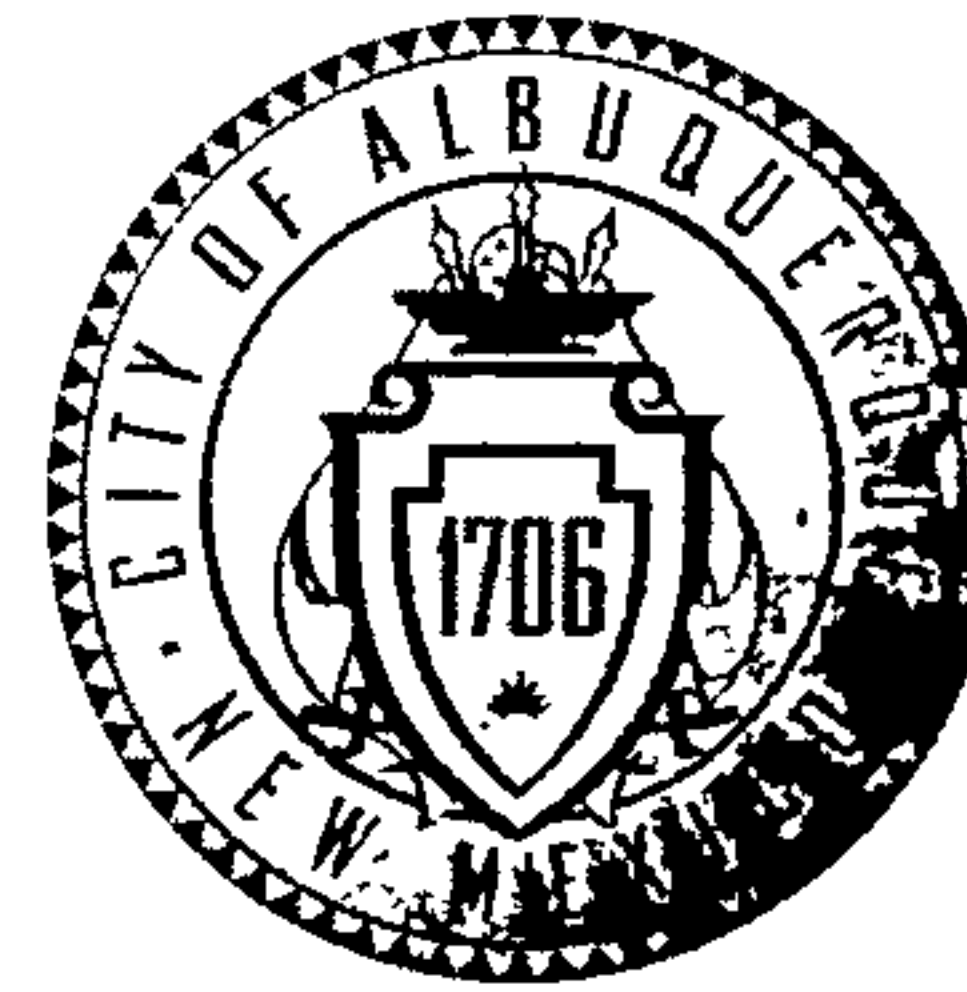
SUBMITTED BY: Gregory J. Krenik, PE  DATE: July 13, 2010

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 define 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.



# CITY OF ALBUQUERQUE



July 21, 2011

Gregory J. Krenik, P.E.  
**Mark Goodwin & Associates, P.A.**  
P.O. Box 90606  
Albuquerque, NM 87199

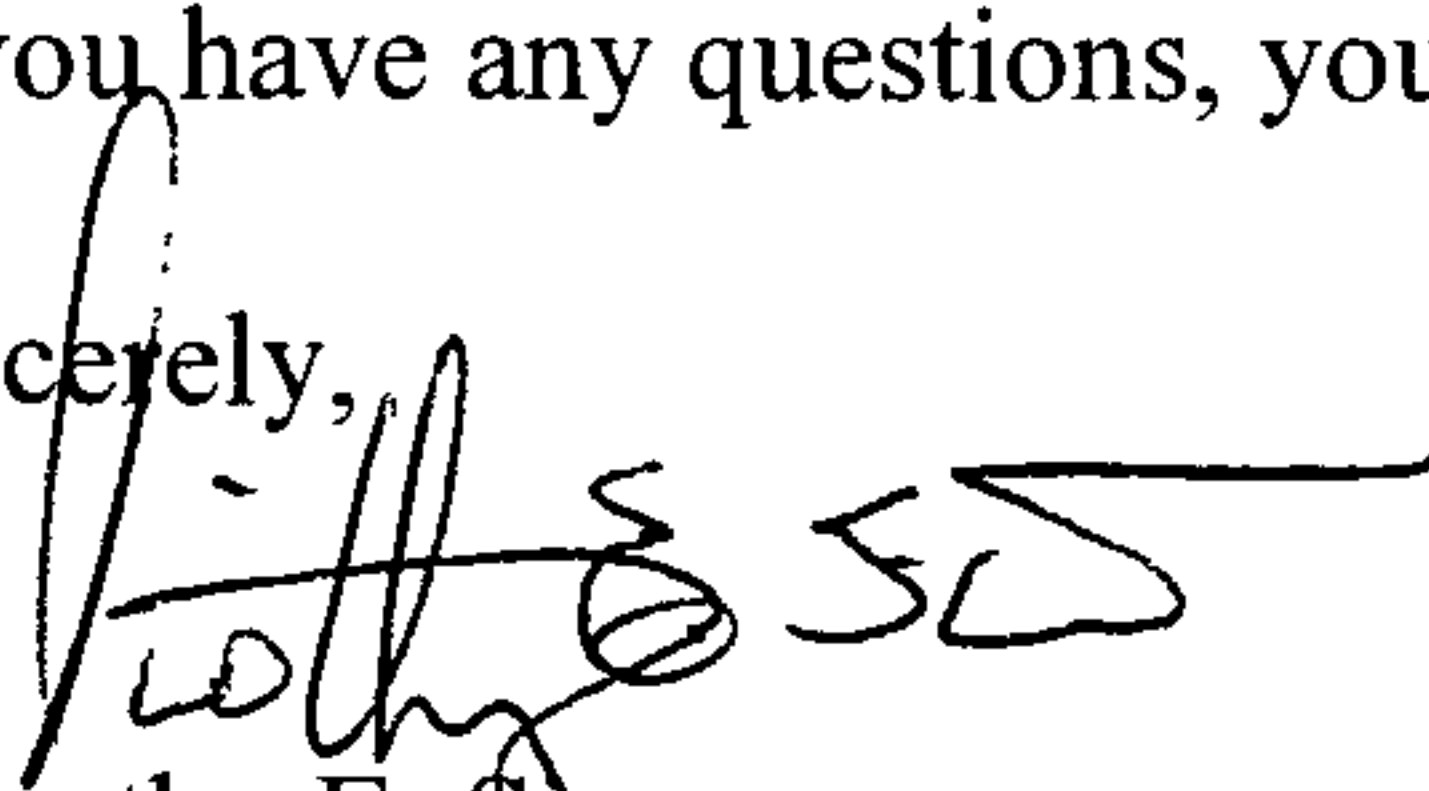
**Re: After Hours Pediatrics, 5904 Holly Ave NE,  
Request for Permanent C.O. - Approved  
Engineer's Stamp dated: 8-25-10 (C-18/D073)  
Certification dated: 7-20-11**

Dear Mr. Krenik,

Based upon the information provided in the Certification received 7-20-11, the above referenced Certification is approved for a release of a Permanent Certificate of Occupancy by Hydrology.

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

Sincerely,

  
Timothy E. Sims,  
Plan Checker—Hydrology Section  
Development and Building Services

PO Box 1293

Albuquerque

NM 87103

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

C: CO Clerk—Katrina Sigala  
File

**DRAINAGE AND TRANSPORTATION INFORMATION SHEET**  
(Rev. 12/05)

PROJECT TITLE: After Hours Pediatrics ZONE MAP/DRG. FILE # C-18/D073  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: Lot 21, Block 18, Tract A, Unit B, NAA  
CITY ADDRESS: 5904 HOLLY AVE NE 87113

ENGINEERING FIRM: Mark Goodwin & Associates, PA CONTACT: Gregory J. Krenik  
ADDRESS: P.O. Box 90606 PHONE: 828-2200  
CITY, STATE: Albuquerque, NM ZIP CODE: 87199

OWNER: After Hours Pediatrics CONTACT: Dr. Bill Hawk  
ADDRESS: 9201 Montgomery Blvd. NE PHONE: 298-2505  
CITY, STATE: Albuquerque, NM ZIP CODE: 87111

ARCHITECT: Mullen Heller Architecture CONTACT: Mike Madden  
ADDRESS: 924 Park Ave. SW, Suite B PHONE: 268-4144  
CITY, STATE: Albuquerque, NM ZIP CODE: 87102

SURVEYOR: WayJohn Surveying, Inc. CONTACT: Tim Johnson  
ADDRESS: 330 Louisiana Blvd. NE PHONE: 255-2052  
CITY, STATE: Albuquerque, NM ZIP CODE: 87108

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

TYPE OF SUBMITTAL:  
\_\_\_\_ DRAINAGE REPORT  
\_\_\_\_ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL  
\_\_\_\_ DRAINAGE PLAN RESUBMITTAL  
\_\_\_\_ CONCEPTUAL G & D PLAN  
\_\_\_\_ GRADING PLAN  
\_\_\_\_ EROSION CONTROL PLAN  
☒ ENGINEER'S CERT (HYDROLOGY)  
\_\_\_\_ CLOMR/LOMR  
\_\_\_\_ TRAFFIC CIRCULATION LAYOUT  
\_\_\_\_ ENGINEER/ARCHITECT CERT (TCL)  
\_\_\_\_ ENGINEER/ARCHITECT (DRB SITE PLAN)  
\_\_\_\_ OTHER

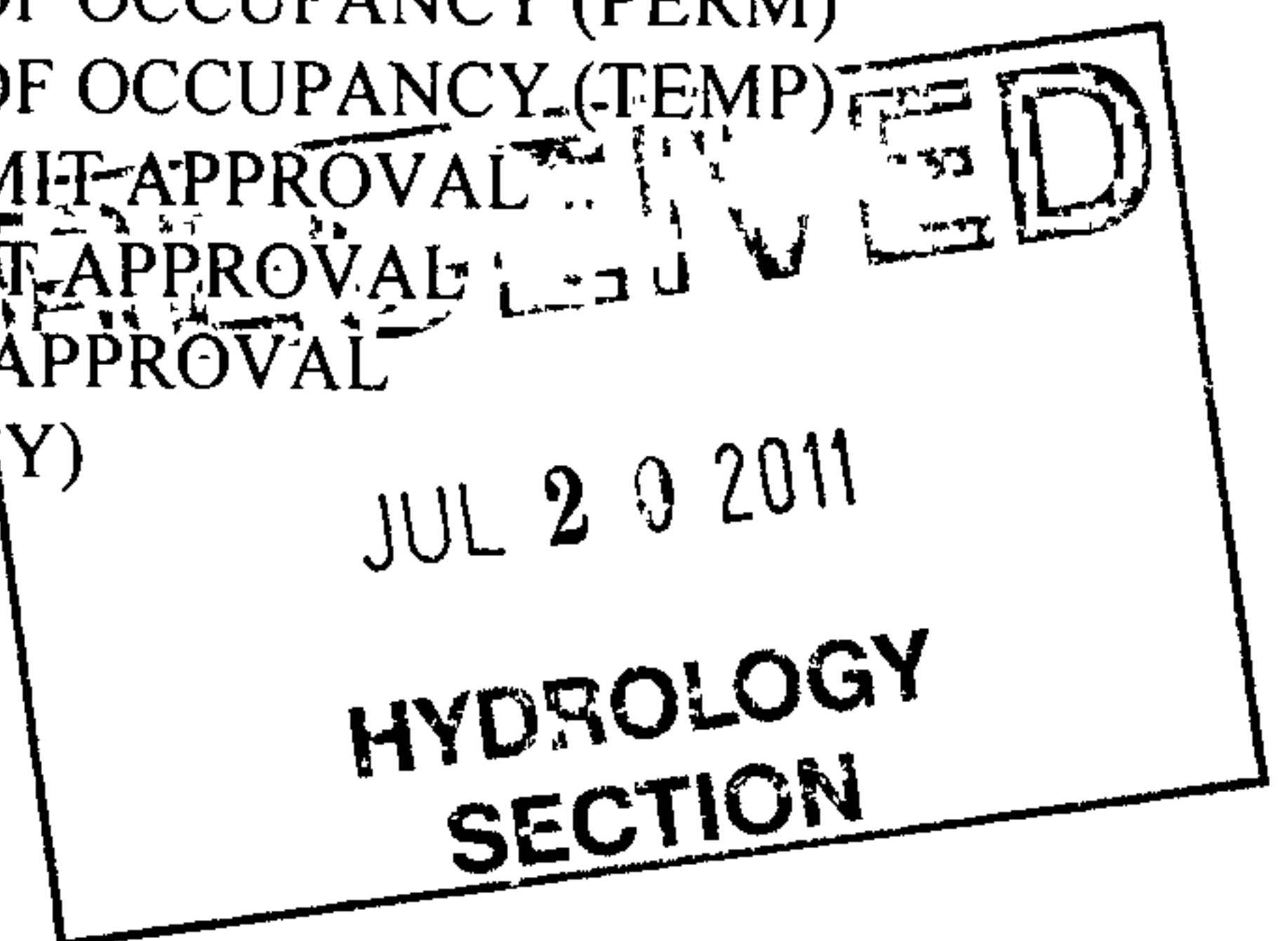
CHECK TYPE OF APPROVAL SOUGHT:  
\_\_\_\_ SIA/FINANCIAL GUARANTEE RELEASE  
\_\_\_\_ PRELIMINARY PLAT APPROVAL  
\_\_\_\_ S. DEV. PLAN FOR SUB'D APPROVAL  
\_\_\_\_ S. DEV. FOR BLDG. PERMIT APPROVAL  
\_\_\_\_ SECTOR PLAN APPROVAL  
\_\_\_\_ FINAL PLAT APPROVAL  
\_\_\_\_ FOUNDATION PERMIT APPROVAL  
\_\_\_\_ BUILDING PERMIT APPROVAL  
☒ CERTIFICATE OF OCCUPANCY (PERM)  
\_\_\_\_ CERTIFICATE OF OCCUPANCY (TEMP)  
\_\_\_\_ GRADING PERMIT APPROVAL  
\_\_\_\_ PAVING PERMIT APPROVAL  
\_\_\_\_ WORK ORDER APPROVAL  
\_\_\_\_ OTHER (SPECIFY)

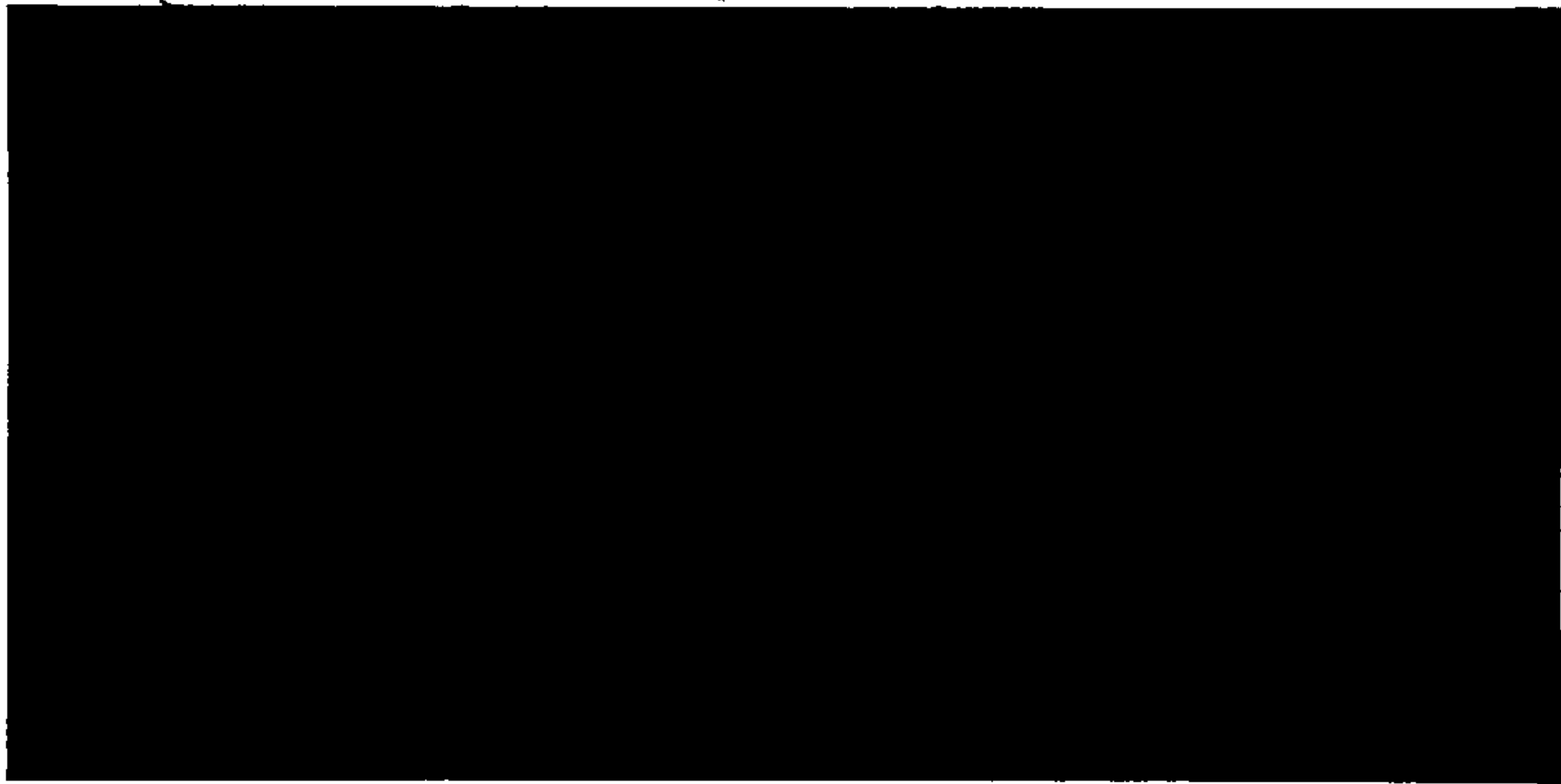
WAS A PRE-DESIGN CONFERENCE ATTENDED:  
☒ YES  
\_\_\_\_ NO  
\_\_\_\_ COPY PROVIDED

SUBMITTED BY: Gregory J. Krenik, PE  DATE: 7-20-11

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 define 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.





**RECEIVED**  
AUG 20 2010  
HYDROLOGY  
SECTION

---

**MARK GOODWIN**

**& ASSOCIATES**  
CONSULTING ENGINEERS

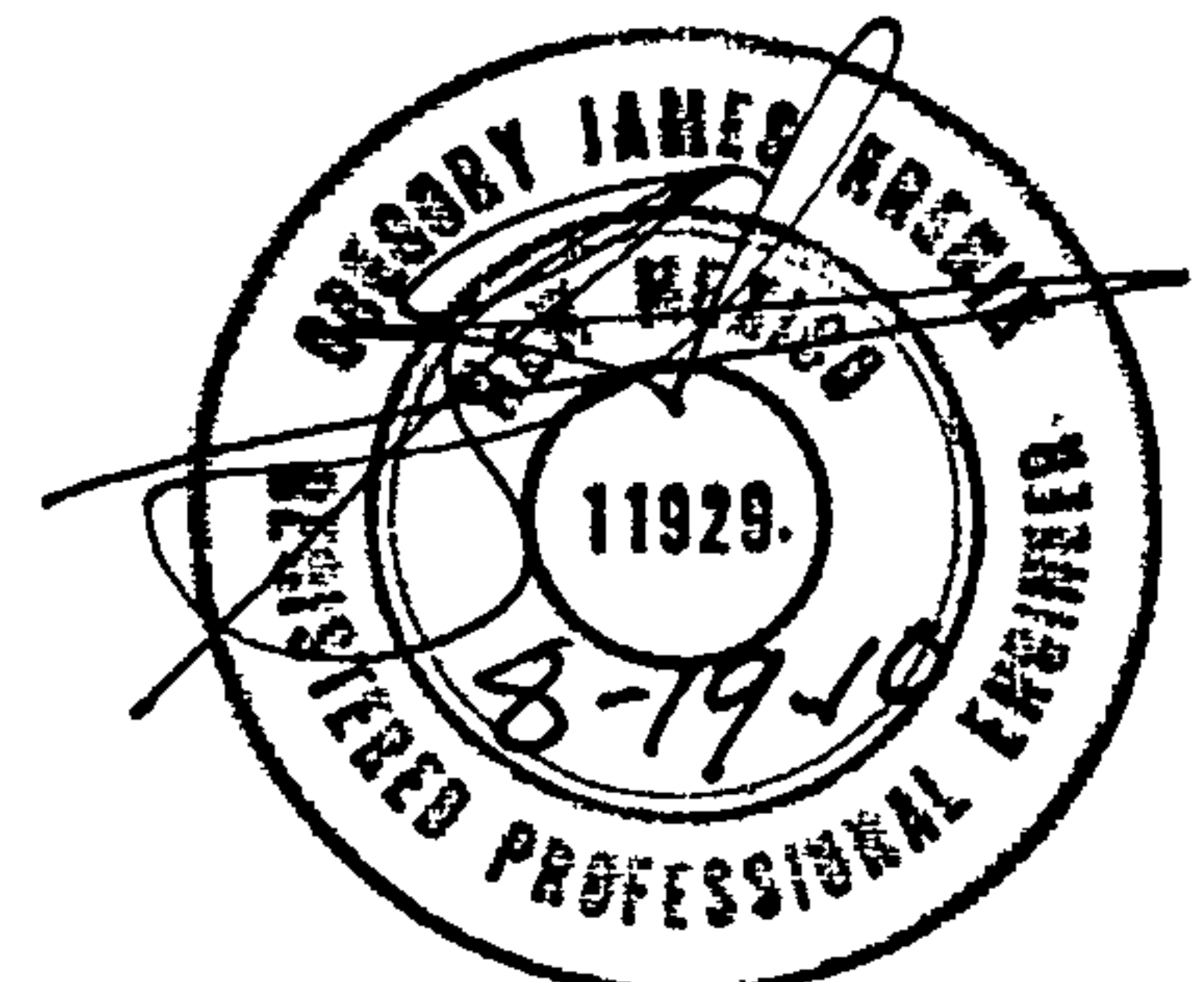
dmg

**DRAINAGE REPORT**  
**for**  
**AFTER HOURS PEDIATRICS**

*Prepared by*

Mark Goodwin & Associates, PA  
PO Box 90606  
Albuquerque, NM 87199  
(505) 828-2200

August 2010









D. Mark Goodwin & Associates, P.A.  
Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE, NM 87199  
(505) 828-2200 FAX 797-9539

PROJECT AFTER HOURS PEDIATRICS  
SUBJECT DRAINAGE CALCS  
BY GJK DATE 8-5-10  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_

SHEET 1 OF \_\_\_\_\_

REVISED 8-19-10

- SITE DOES NOT LIE IN A 100 YR FLOOD ZONE
- SITE IS ALLOWED FREE DISCHARGE AS LONG AS IT FOLLOWS THE PARAMETERS OF THE "DRAINAGE AGREEMENT" RECORDED 2-19-08 FOR THESE PROPERTIES. (APPENDIX A) THIS SITE IS ALLOWED 4.6290 CFS/ACRE BASED ON THE DRAINAGE AGREEMENT.
- SITE CONSISTS OF 0.8843 ACRES.
- OFFSITE FLOWS FROM LOT 20 ARE ALLOWED TO PASS THROUGH THIS SITE. CURRENTLY THE LOT IS UNDEVELOPED BUT BOTH UNDEVELOPED AND DEVELOPED FLOWS ARE ALLOWED TO PASS THROUGH THIS SITE.
- RUNOFF DISCHARGE WILL BE ACROSS LOT 12 VIA A TEMPORARILY ASPHALT CHANNEL WHERE IT WILL DISCHARGE TO HOLLY AVE BY WAY OF FOUR SUNK-CULVERTS.
- THERE IS AN OFFSITE AREA OF PAVED DEL NORTE ROW THAT DRAINS ONTO OUR SITE IT CONSISTS OF A STRIP 150' LONG BY 18' WIDE FORM AREA OF 0.0620 AC.

• DETERMINE RUNOFF

$$P_1 = 2.1011$$

$$P_6 = 2.4511$$

$$P_{24} = 2.8511$$

• TOTAL AREA OF SITE

$$= 0.8843$$

$$\text{SITE LANDSCAPING} = 0.1793 \text{ AC} = 0.08965 \text{ AC 'B'} + 0.08965 \text{ AC 'C'}$$
$$\text{REMAINING SITE AREA} = 0.7050 \text{ AC TYPE 'D'}$$

$$\text{TOTAL 'B'} = 0.08965 \text{ AC} = 10.14 \%$$

$$\text{'C'} = 0.08965 \text{ AC} = 10.14 \%$$

$$\text{'D'} = 0.7050 \text{ AC} = 79.72 \%$$

FROM AHYMO OUTPUT SHEETS 4-7

$$Q = 3.99 \text{ CFS}$$

• PER THE DRAINAGE AGREEMENT

$$Q = 0.8843 \text{ AC} \times 4.6290 \text{ CFS/AC}$$

$$= 4.09 \text{ CFS} > 3.99 \text{ CFS} \quad \text{OK}$$





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PROJECT AFTER HOURS PEDIATRICS  
SUBJECT DRAINAGE CALCS  
BY GSK DATE 8-5-10  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_  
SHEET 2 OF \_\_\_\_\_  
REVISED 8-19-10

PDN ROW = 0.0620 AC 100% "C"

FROM AHYMO OUTPUT SHEETS 4-7

$$Q = 0.22 \text{ CFS}$$

- WE ASSUME THE RUNOFF FROM THE PDN ROW IS ALLOWED TO PASS THROUGH THE SITE WITHOUT PONDING.

TOTAL Q THROUGH LOT 21

$$Q = 3.99 + 0.22 \\ = 4.21 \text{ CFS}$$

ASSUME LOT 20 RUNOFF IS THE SAME AS LOT 21.

TOTAL Q TO CHANNEL ACROSS LOT 12 IS

$$Q = 4.21 \times 2 = 8.42 \text{ CFS}$$

- DETERMINE THE FLOW AT ROOF DRAINS

THE ROOF WILL BE DIVIDED INTO 9 BASINS

FROM AHYMO OUTPUT SHEETS 4-7

$$Q = 0.87 \text{ CFS FOR ENTIRE ROOF}$$

FIND EACH ROOF BASIN BASED ON PERCENTAGE

ROOF BASIN	% OF AREA	Q CFS	
1	3.45	0.03	] DRAIN TO SWALE
2	6.90	0.06	
3	14.94	0.13	
4	8.04	0.07	
5	36.78	0.32	
6	10.34	0.09	
7	6.90	0.06	] DRAIN TO PARKING LOT
8	5.75	0.05	
9	6.90	0.06	
		<u>0.87 CFS</u>	

- DETERMINE FLOW IN SWALE AROUND BUILDING

BLDG AREA = 6672 SF TYPE 'D'

PDN AREA = 2700 SF TYPE 'C'

PNM. PAD AREA = 36 SF TYPE 'D'

LANDSCAPE AREA = 4713 SF 50% 'B' + 50% 'C'

$$\text{TOTAL} = 14,121 \text{ SF}$$

$$= 0.3242 \text{ AC}$$



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PROJECT AFTER HOURS PEDIATRICS  
SUBJECT DRAINAGE CALCS  
BY GSK DATE 8-5-10  
CHECKED \_\_\_\_\_ DATE \_\_\_\_\_  
SHEET 3 OF \_\_\_\_\_

REVISED 8-19-10

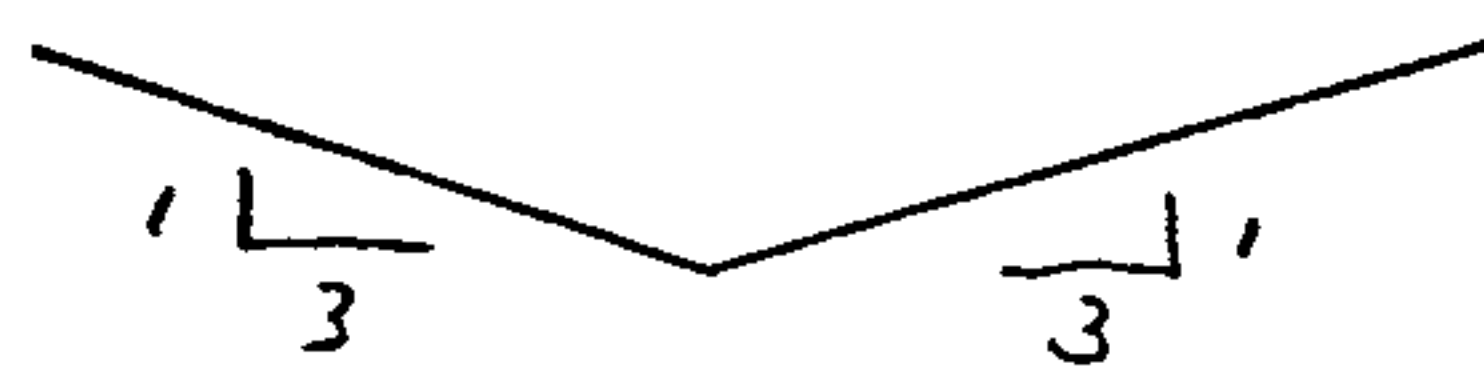
TOTAL  $B' = 16.61\%$   
 $C' = 35.73\%$   
 $D = 47.66\%$

FROM AH4MO OUTPUT SHEETS 4-7

$Q = 1.29 \text{ cfs}$

• SIZE SWALE

$d = 0.55'$   
 $WP = 3.4785$   
 $A = 0.9075$   
 $V = 1.43 \text{ F/S}$   
 $Q = 1.30 \text{ cfs} \approx 1.29 \text{ cfs}$   
 $d + V^2/2g = 0.58$

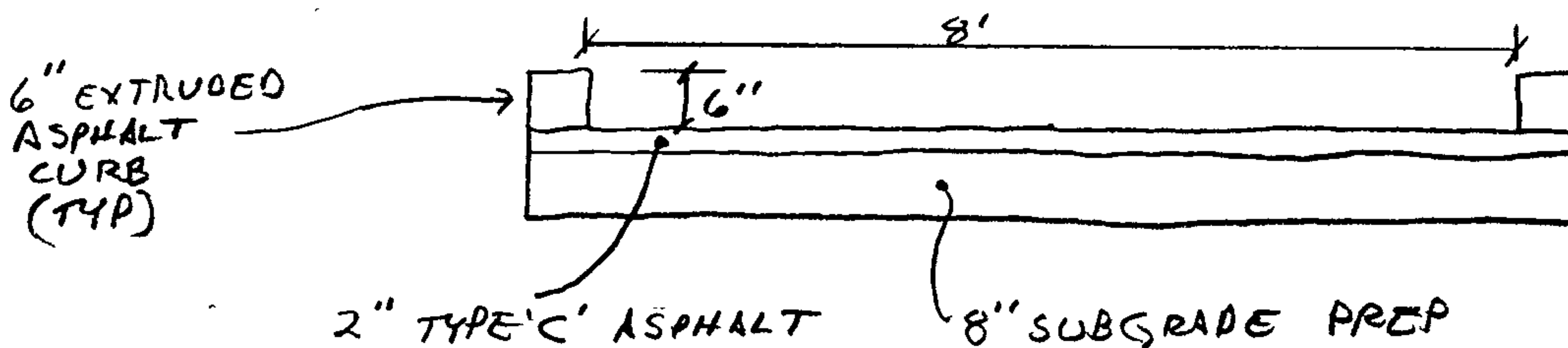


$S = 0.5\%$   
 $n = 0.03$

MINIMUM DEPTH OF SWALE TO BE 0.6'

• DETERMINE CHANNEL ACROSS LOT 12

WORST CASE  $Q = 8.42 \text{ cfs}$  FULLY DEVELOPED LOTS 20+21



• DETERMINE CHANNEL OPENING + WIDTH

$Q = 2.95 L H^{1.5}$

$H = 0.5$

$Q = 8.42 \text{ cfs}$

$L = 8.07'$

USE 10'

$S = 1.0\%$   $n = 0.017$

$d = 0.29$

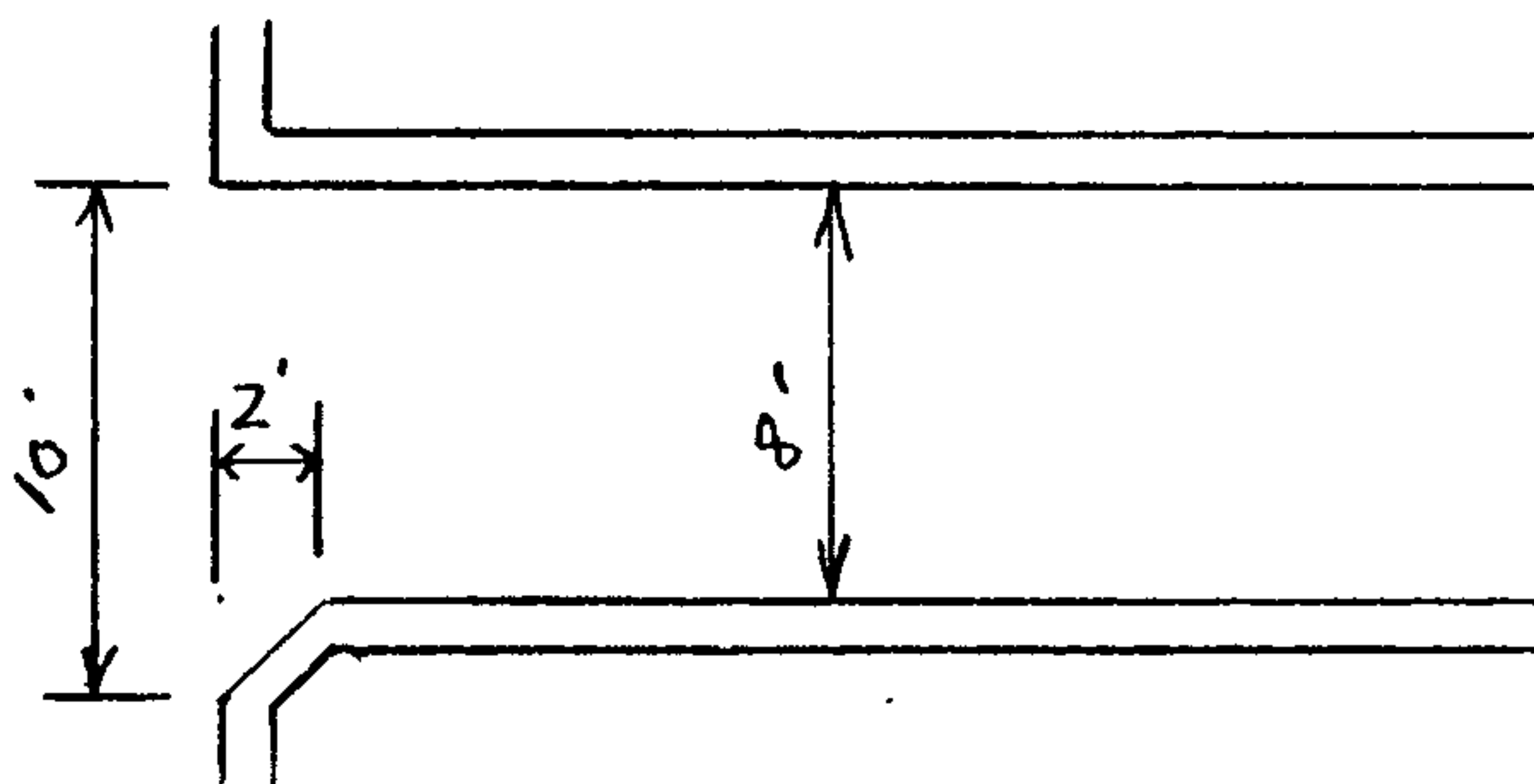
$WP = 8.58$

$A = 2.32$

$V = 3.66 \text{ F/S}$

$Q = 8.49 \text{ cfs} \approx 8.42 \text{ cfs}$

$d + V^2/2g = 0.5 = 0.5 \text{ cfs}$



• CHANNEL WILL TERMINATE AT FOUR NEW 2' SOWK CULVERTS AT HOLLY AVE NE.



```
START                TIME=0.0
***** HYDROGRAPH FOR PEDIATRIC CLINIC - PASEO DEL NORTE
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.10 IN RAIN SIX=2.45 IN
                     RAIN DAY=2.85 IN DT=0.03333 HR

***** SITE ONLY
COMPUTE NM HYD       ID=1 HYD NO=101.1 AREA=0.001382 SQ MI
                     PER A=0 B=10.14 C=10.14 D=79.72
                     TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
***** ROOF AREA ONLY
COMPUTE NM HYD       ID=1 HYD NO=101.1 AREA=0.000275 SQ MI
                     PER A=0 B=0 C=0 D=100
                     TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
***** ROOF AREA WITH PDN ROW AND SWALE AREA
COMPUTE NM HYD       ID=1 HYD NO=101.1 AREA=0.000507 SQ MI
                     PER A=0 B=16.61 C=35.73 D=47.66
                     TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
***** PDN ROW ONLY
COMPUTE NM HYD       ID=1 HYD NO=101.1 AREA=0.000097 SQ MI
                     PER A=0 B=0 C=100 D=0
                     TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD            ID=1 CODE=1
FINISH
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AHYMO PROGRAM (AHYMO\_97) -

- Version: 1997.02d

RUN DATE (MON/DAY/YR) = 08/19/2010

START TIME (HR:MIN:SEC) = 14:30:27

USER NO.= AHYMO-I-9702dGoodwinM-AH

INPUT FILE = pedclin.dat

START

TIME=0.0

\*\*\*\*\* HYDROGRAPH FOR PEDIATRIC CLINIC - PASEO DEL NORTE

RAINFALL

TYPE=1 RAIN QUARTER=0.0 IN

RAIN ONE=2.10 IN RAIN SIX=2.45 IN

RAIN DAY=2.85 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK

AT 1.40 HR.

DT = .033330 HOURS			END TIME = 5.999400 HOURS			
.0000	.0016	.0033	.0050	.0067	.0085	.0103
.0122	.0141	.0161	.0181	.0202	.0223	.0244
.0267	.0290	.0314	.0338	.0364	.0390	.0417
.0445	.0475	.0505	.0537	.0570	.0605	.0641
.0679	.0720	.0763	.0821	.0883	.0949	.1091
.1410	.1900	.2605	.3566	.4830	.6441	.8447
1.0895	1.3168	1.4117	1.4918	1.5631	1.6279	1.6876
1.7430	1.7948	1.8433	1.8890	1.9321	1.9728	2.0114
2.0479	2.0825	2.1153	2.1465	2.1761	2.1829	2.1892
2.1952	2.2009	2.2063	2.2115	2.2165	2.2213	2.2259
2.2304	2.2347	2.2388	2.2429	2.2468	2.2506	2.2543
2.2580	2.2615	2.2649	2.2683	2.2716	2.2748	2.2779
2.2810	2.2840	2.2869	2.2898	2.2927	2.2955	2.2982
2.3009	2.3035	2.3061	2.3087	2.3112	2.3137	2.3161
2.3185	2.3209	2.3232	2.3255	2.3278	2.3300	2.3322
2.3344	2.3365	2.3387	2.3408	2.3428	2.3449	2.3469
2.3489	2.3509	2.3528	2.3547	2.3567	2.3585	2.3604
2.3623	2.3641	2.3659	2.3677	2.3695	2.3712	2.3729
2.3747	2.3764	2.3781	2.3797	2.3814	2.3830	2.3847
2.3863	2.3879	2.3895	2.3910	2.3926	2.3942	2.3957
2.3972	2.3987	2.4002	2.4017	2.4032	2.4046	2.4061
2.4075	2.4090	2.4104	2.4118	2.4132	2.4146	2.4160
2.4173	2.4187	2.4200	2.4214	2.4227	2.4240	2.4254
2.4267	2.4280	2.4292	2.4305	2.4318	2.4331	2.4343
2.4356	2.4368	2.4380	2.4393	2.4405	2.4417	2.4429
2.4441	2.4453	2.4465	2.4476	2.4488	2.4500	

\*\*\*\*\* SITE ONLY

COMPUTE NM HYD

ID=1 HYD NO=101.1 AREA=0.001382 SQ MI

PER A=0 B=10.14 C=10.14 D=79.72

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE  
CONSTANT, N = 7.106420  
UNIT PEAK = 4.3497 CFS UNIT VOLUME = .9969 B = 526.28  
P60 = 2.1000  
AREA = .001102 SQ MI IA = .10000 INCHES INF = .04000 INCHES  
PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
.033330

K = .120817HR TP = .133300HR K/TP RATIO = .906356 SHAPE  
CONSTANT, N = 3.908546  
UNIT PEAK = .73384 CFS UNIT VOLUME = .9820 B = 349.03  
P60 = 2.1000  
AREA = .000280 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES  
PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =

6

.033330

PRINT HYD

ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.97232 INCHES = .1454 ACRE-FEET  
PEAK DISCHARGE RATE = 3.99 CFS AT 1.500 HOURS BASIN AREA = .0014  
SQ. MI.

\*\*\*\*\* ROOF AREA ONLY

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.000275 SQ MI  
PER A=0 B=0 C=0 D=100  
TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE  
CONSTANT, N = 7.106420  
UNIT PEAK = 1.0857 CFS UNIT VOLUME = .9881 B = 526.28  
P60 = 2.1000  
AREA = .000275 SQ MI IA = .10000 INCHES INF = .04000 INCHES  
PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
.033330

PRINT HYD

ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 2.21516 INCHES = .0325 ACRE-FEET  
PEAK DISCHARGE RATE = .87 CFS AT 1.500 HOURS BASIN AREA = .0003  
SQ. MI.

\*\*\*\*\* ROOF AREA WITH PDN ROW AND SWALE AREA

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.000507 SQ MI  
PER A=0 B=16.61 C=35.73 D=47.66  
TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE  
CONSTANT, N = 7.106420  
UNIT PEAK = .95399 CFS UNIT VOLUME = .9881 B = 526.28  
P60 = 2.1000  
AREA = .000242 SQ MI IA = .10000 INCHES INF = .04000 INCHES  
PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
.033330

K = .116304HR TP = .133300HR K/TP RATIO = .872495 SHAPE  
CONSTANT, N = 4.070878  
UNIT PEAK = .71640 CFS UNIT VOLUME = .9824 B = 359.87  
P60 = 2.1000  
AREA = .000265 SQ MI IA = .39760 INCHES INF = .96329 INCHES  
PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
.033330

PRINT HYD

ID=1 CODE=1

7

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.62415 INCHES = .0439 ACRE-FEET  
PEAK DISCHARGE RATE = 1.29 CFS AT 1.500 HOURS BASIN AREA = .0005  
SQ. MI.

\*\*\*\*\* PDN ROW ONLY

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.000097 SQ MI  
PER A=0 B=0 C=100 D=0  
TP=0.1333 HR MASS RAINFALL=-1

K = .108461HR TP = .133300HR K/TP RATIO = .813662 SHAPE  
CONSTANT, N = 4.394154  
UNIT PEAK = .27699 CFS UNIT VOLUME = .9513 B = 380.65  
P60 = 2.1000  
AREA = .000097 SQ MI IA = .35000 INCHES INF = .83000 INCHES  
PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  
.033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = 1.21559 INCHES = .0063 ACRE-FEET  
PEAK DISCHARGE RATE = .22 CFS AT 1.500 HOURS BASIN AREA = .0001  
SQ. MI.

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 14:30:27



11  
12  
13  
14  
15

## Appendix A





## DRAINAGE AGREEMENT

1100509  
This Drainage Agreement ("**Agreement**") is made as of the 31 day of January, 2008, by and between Paseo Place, LLC, a New Mexico limited liability company ("**Paseo**") and Holly- SP, LLC, a New Mexico limited liability ("**Holly**"). Paseo and Holly may at times hereinafter be referred to collectively as the "**Parties**" or singularly as a "**Party**."

### PREAMBLE

A. Whereas, Paseo is the fee owner of that certain parcel of real property located adjacent to the northwest corner of Paseo del Norte and San Pedro in the City of Albuquerque, County of Bernalillo, State of New Mexico ("**Paseo Parcel**"), which real property is shown on Exhibit "C" and more particularly described in Exhibit "B" attached hereto and by this reference incorporated herein.

B. Whereas, Holly is the fee owner of that certain parcel of real property located adjacent to the northwest corner of Paseo del Norte and San Pedro in the City of Albuquerque, County of Bernalillo, State of New Mexico ("**Holly Parcel**"), which real property is shown on Exhibit "C" and more particularly described in Exhibit "A" attached hereto and by this reference incorporated herein.

C. Whereas, Holly and Paseo Parcels (collectively, the "**Property**") are located adjacent to each other.

D. Whereas, the Parties desire to enter into this Agreement to establish drainage easements within the common areas of each Parcel for the mutual benefit of each Parcel and to establish a shared storm water management plan for the Property.

**NOW THEREFORE**, in consideration of the above premises and the mutual covenants and conditions herein contained, the Parties hereby grant and establish the following drainage easements for the mutual benefit of Paseo and Holly Parcels.

### ARTICLE I

#### DEFINITIONS

Unless the context otherwise specifies or requires, the terms defined in this Article I shall, for all purposes of this Agreement have the meaning herein specified.

Section 1.01. Common Area. "**Common Area**" shall mean all of those areas on the Property which are not from time to time, and at any applicable time, occupied by buildings. By way of illustration, 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.

Section 1.02. Mortgage/Mortgagee. "**Mortgage**" shall mean a mortgage, deed of trust or other security device affecting all or any portion of or interest in the Property and which has been recorded in the real property records of Bernalillo County (hereinafter "Official Records") and "**Mortgagee**" shall mean and refer to the mortgagee, beneficiary or other holder of any of the foregoing instruments, provided the name and address of such mortgagee, beneficiary or other holder shall appear among the aforesaid Official Records.

Section 1.03. Owner. "**Owner**" shall mean any Person having any fee simple estate in any portion of the Property, excluding any Person who holds such interest as security for the payment of an obligation, but including any Mortgagee or other security holder in actual possession of any portion of the Property by foreclosure or otherwise, and any Person taking title from any such security holder.

Section 1.04. Person. "**Person**" shall mean artificial persons or legal entities (such as corporations, limited liability companies, partnerships, trusts, etc.) as well as natural persons.

## ARTICLE II

### DRAINAGE EASEMENTS

Section 2.03. Drainage. (A) The Parties hereby jointly establish, grant and convey for the benefit of the entire Property, each Owner thereof, its successors, assigns and lessees, a perpetual, non-exclusive, reciprocal drainage easement over, upon, under and across the Common Area of each Parcel for the benefit of each other Parcel, for the purposes of drainage of storm and surface water. The Parties also hereby agree to establish, grant and convey non-exclusive and perpetual easements to each other to install, maintain, operate, repair and replace storm water collection,

retention, detention and distribution lines, conduits, pipes and other drainage apparatus (the "**Drainage Facilities**") under and across the Common Area of each Parcel.

(B) The drainage easements granted hereby are solely for the purposes set forth above, provided, however, that in using the easements granted hereby, any Owner who goes, or causes its agent or any utility company to go, upon any other Owner's property or Common Area shall (i) give the other Owner(s) at least twenty (20) days prior written notice together with a drawing of any proposed installation or relocation of any Drainage Facilities; (ii) cause such use of its drainage easement to be conducted in a manner which, under the circumstances, is the least disruptive to the other Owner(s), their tenants, and the customers and invitees of each of them; (iii) cause such use to be completed with due regard for the safety of all persons coming onto such property or Common Area, and (iv) cause, at its expense, any damage to any other Owner's or its tenant's improvements (including without limitation, pavement) to be promptly repaired and restored as near as practicable to the prior condition of such improvement.

(C) Holly hereby agrees to construct ponds and drainage improvements on the Holly Parcel as shown on Exhibit "C" and Exhibit "D: attached hereto and made a part hereof to meet the drainage needs for the Property to the limits set forth below. With consideration for the ponds and drainage improvements constructed on the Holly Parcel, Paseo will be allowed to discharge from the Paseo Parcel to Holly Street a total discharge of 16.3730 cfs (a rate of 4.6290 cfs/acre). Detention will be required on the Paseo Parcel for any discharge to Holly Street from the Paseo Parcel in excess of this amount. Such excess discharge shall be the sole responsibility of each Owner on its own parcel. With consideration for the ponds and drainage improvements constructed on the Holly Parcel, Holly will be allowed to discharge from the Holly Parcel to Holly Street a total discharge of 13.1270 cfs. The discharge from Holly shall occur in a combination of free discharge and discharge from the the detention ponds and drainage improvements depicted on Exhibit D. Additional detention will be required on the Holly Parcel for any discharge to Holly Street from the Holly Parcel in excess of this amount. Such excess discharge shall be the sole responsibility of each Owner on its own parcel. A copy of the Holly Place Grading & Drainage Plans, Report, and City Approval Letter is attached hereto as Exhibit D and made a part hereof.



(D) Paseo hereby agrees to reimburse Holly for 50% of the shared drainage improvements constructed by Holly for the use and benefit of Holly and Paseo.

(E) Each such Owner shall be liable to such other Owners and tenants for any breach of the foregoing obligations, and each such Owner shall indemnify such other Owners and tenants and hold such other Owners and tenants free, clear and harmless from any and all claims, actions, demands, causes of action, costs and expenses whatsoever (including attorneys fees and court costs) for any personal injury or property damage arising from or as a result of such Owner's use of a drainage easement upon such other Owner's property or Common Area.

(F) Once constructed, (i) the Drainage Facilities shall not be modified, altered or otherwise changed, without the prior written consent of all Owners; and (ii) each Owner shall operate and maintain, or cause to be operated and maintained, in good order, condition and repair, the Drainage Facilities located upon its Parcel and make any and all repairs and replacements that may from time to time be required with respect thereto.

### ARTICLE III GENERAL

Section 3.01. Notices. All notices required to be given pursuant to the provisions of this Agreement shall be in writing and delivered in accordance with the following accepted forms of delivery: (a) hand delivery with a signature and date to verify receipt; (b) via Federal Express (or similar overnight carrier) for priority overnight delivery; (c) via United States Postal Service postage prepaid, by Certified or Registered Mail, return receipt requested; or (d) via facsimile (together with a copy sent by regular United States mail) to:

If to Paseo:	Paseo Place, LLC
	7620 Jefferson NE
	Albuquerque, NM 87109
	PH: 505.878.0001
	FAX: 505.878.0002

If to Holly: Holly- SP, LLC  
7600 Jefferson NE, Suite 27  
Albuquerque, NM 87109  
PH: 505.858.0001  
FAX: 505.858.3101

or to such address as is thereafter provided by the parties hereto. If written notice is hand delivered it shall be deemed received upon delivery. If written notice is sent via Federal Express, it shall be deemed received the next business day following the date of sending. If written notice is mailed via United States Certified or Registered Mail, it shall be deemed received upon the earlier of actual receipt or on the third business day following the date of mailing. If written notice is sent via facsimile, it shall be deemed received upon transmission provided successful transmission has been confirmed by a printed confirmation sheet. In addition, all notices sent by facsimile shall also be mailed via regular United States Mail.

Section 3.02. Maintenance. Each Owner shall at all times maintain its portion of the Property and all improvements thereon in a safe, clean, neat, attractive and sanitary condition as appropriate for a first class commercial property, and in all respects in compliance with all governmental zoning, health, fire and police requirements.

Section 3.03. Taxes. As to any portion of the Property, it is intended that all real estate taxes and assessments by public authority relating to said land and improvements thereon or the ownership thereof, shall be paid prior to delinquency by the respective Owner thereof.

Section 3.04. Default. This Agreement shall create privity of contract and estate with and among all grantees of all or any part of the Property and their respective heirs, executors, administrators, successors and assigns. In the event of a breach, or attempted or threatened breach by any Owner of any part of the Property, in any of the terms, covenants, and conditions hereof, any one or all such other Owners of any part of the Property shall be entitled forthwith to full and adequate relief by injunction and all such other available legal and equitable remedies from the consequences of such breach. In addition to all other remedies available at law or in equity, upon the failure of

a defaulting party to cure a breach of this Agreement within thirty (30) days following written notice thereof by another party (unless, with respect to any such breach the nature of which cannot reasonably be cured within such thirty (30) day period, the defaulting party commences such cure within such thirty (30) day period and thereafter diligently pursues such cure to completion) the non-defaulting party or parties shall have the right to perform such obligation contained in this Agreement on behalf of such defaulting party and be reimbursed by such defaulting party, upon demand, for the reasonable costs incurred in the course of curing such default together with interest thereon at the prime rate for Bank One (or any successor institution) plus two percent (2%) (not to exceed the maximum rate of interest allowed by law). The remedies permitted at law or equity of any one or all such Owners specified herein shall be cumulative as to each and as to all.

Section 3.05. Insurance. Each Owner shall maintain at all times insurance against claims for personal injury or property damage in an amount not less than \$2,000,000.00 with respect to all personal injuries suffered in an accident, and \$500,000.00 with respect to property damage, unless otherwise agreed to in writing by the then record Owners. Upon request, annually each Owner shall provide the other Owner(s) with a certificate of insurance, evidencing the existence of a valid policy of insurance in conformity with the above specifications.

Section 3.06. Covenants Running With The Land. The easements and covenants established by this Agreement shall run in perpetuity and are intended to be and shall be construed as covenants running with the land, binding upon, and inuring to the benefit of and enforceable by the Parties and all subsequent Owners of the Property or any part thereof, provided however, that nothing contained herein shall be construed as a grant for the benefit of any other Owner of any right or easement in any part of its property for parking purposes. If during the existence of this Agreement, an Owner of all or any part of the Property shall sell or transfer or otherwise terminate its interest as Owner, then from and after the effective date of such sale, transfer, or termination of interest, such party shall be released and discharged from any and all obligations, responsibilities and liabilities under this Agreement as to the parts sold or transferred provided that the transferee assumes all of said obligations, responsibilities and



liabilities, except those obligations, responsibilities and liabilities (if any) which have already accrued as of such date, and any such transferee by the acceptance of the transfer of such interest shall thereupon become subject to the covenants contained herein to the same extent as if such transferee were originally a party hereto. The covenants and easements established hereby are not intended and shall not be construed as a dedication of such rights in the Property for public use, and this Agreement shall not be deemed to vest any rights in any customers, invitees or the public at large, but are solely for the benefit of the Owners of the Property and their lessees, customers and invitees to the extent heretofore established.

Section 3.07. Attorneys Fees. In the event any Owner is required to enforce the provisions hereof through judicial proceedings, the prevailing party shall be entitled to reasonable attorneys fees and court costs from the non-prevailing party.

Section 3.08. Estoppel Certificates. Any Owner of any Parcel shall execute and deliver to any other Owner or its Mortgagee within fifteen (15) days from receipt of such other Owner's request from time to time, an estoppel certificate, in a form reasonably acceptable to the Owner to whom such request is made, which certificate shall include information as to any modification of this Agreement and to the best knowledge of the Owner to whom such request is made, whether or not the requesting Owner is in Default of this Agreement.

Section 3.09. Effective Date. The drainage easements contained herein shall be effective commencing on the date of recordation of this Agreement in the Official Records and may be modified, amended or canceled by recordation in the Official Records of a writing executed by all of the fee Owners of the land area of the Property at the time of such modification, amendment or cancellation.

Section 3.10. Severability. Each provision of this Agreement and the application thereof to each Parcel are hereby declared to be independent of and severable from the remainder of this Agreement. If any provision contained herein shall be held to be invalid or to be unenforceable or not to run with the land, such holding shall not affect the validity or enforceability of the remainder of this Agreement.



Section 3.11. Waiver. No waiver of any default of any obligation by any Owner of all or any part of the Property shall be implied from any omission by the other Owner or Owners to take any action with respect to such default.

Section 3.12. Relationship of the Owners. Nothing in this Agreement shall be deemed or construed by any party or by any third person to create the relationship of principal and agent or of limited or general partners or of joint venturers or of any other association between the parties.

Section 3.13. Jurisdiction. The laws of the State of New Mexico shall govern the interpretation, validity, performance and enforcement of this Agreement.

Section 3.14. Subdivision. Nothing contained herein shall be construed as limiting the right of the Owner of any Parcel to subdivide and or sell all or any portion of its Parcel to any third party, so long as such third party assumes the rights and obligations established hereunder.

Section 3.15. Legal Descriptions. In the event the validity or enforceability of any provision of this Agreement is held to be dependent upon the existence of a specific legal description, the Owners of each Parcel or any portion thereof, shall agree to promptly cause such legal description to be prepared and made a part hereof.


Section 3.16. Liens. All persons doing work for or furnishing labor or materials to any Parcel on the order of or on behalf of such Parcel's Owner shall look solely to that party for payment. Other than as may be set forth specifically to the contrary below, the interests of each party shall not be subject to liens for improvements made by any other party as allowed under this Agreement. If any mechanic's and/or other liens, or order for the payment of money, shall be filed against any Parcel as a result of work performed by or on behalf of any other Owner, the Owner performing or causing such work shall cause the same to be canceled and discharged of record, by bond or otherwise, and shall also defend on behalf of the burdened Owner, any action, suit or proceeding which may be brought for the enforcement of such lien, liens or orders, and said Owner will pay any damage and satisfactorily discharge any judgment entered, and save harmless the burdened Owner from any associated claims, attorney's fees or damages.

ARTICLE IV  
GRANTEE'S COVENANT

Each grantee, tenant or other person in interest, accepting either a deed or any other interest in any Parcel, whether or not the same incorporates or refers to this Agreement, covenants for himself, his heirs, successors and assigns to observe, perform and be bound by this Agreement and to incorporate this Agreement by reference in any deed or other document of conveyance of all or any portion of its interest in any real property subject hereto.

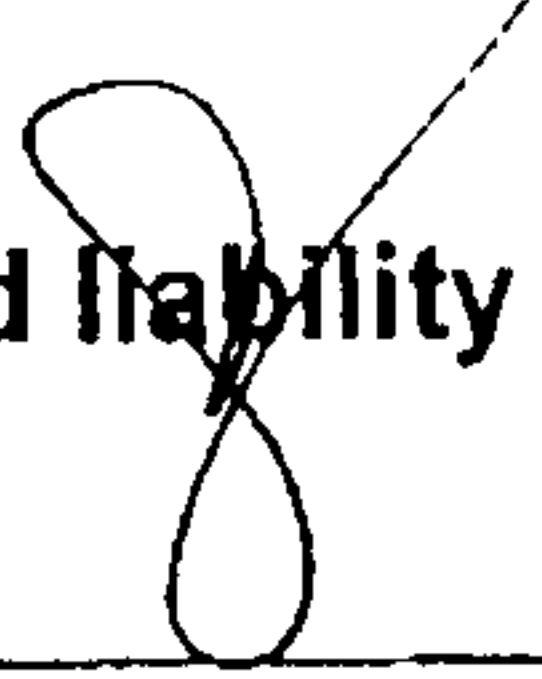
EXECUTED as of the date first above written.

Paseo Place, LLC, a  
New Mexico limited liability company

By: 

Its: MANAGER

Holly-SP, LLC, a  
New Mexico limited liability company

By: 

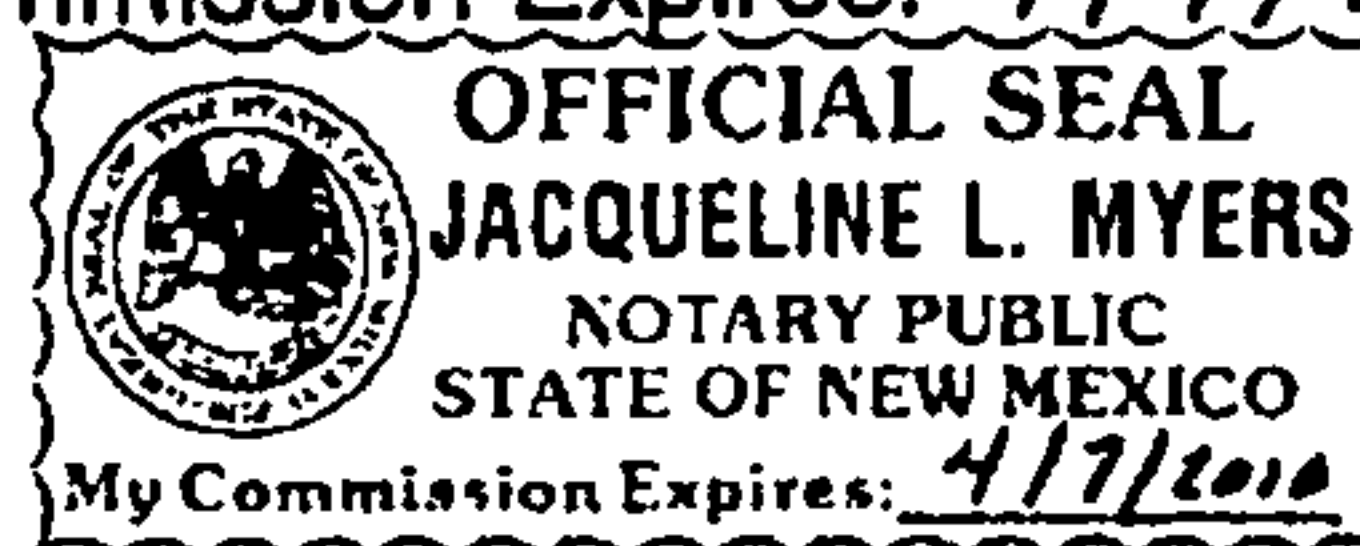
Its: Manager

STATE OF New Mexico )  
COUNTY OF Bernalillo )

SS

This instrument was acknowledged before me this 31 day of January, 2008, by Ben F. Spencer - Manager, on behalf of said Paris Place, LLC.

Jacqueline L. Myers  
NOTARY PUBLIC  
My Commission Expires: 4/7/2010



STATE OF New Mexico )  
COUNTY OF Bernalillo )

SS

This instrument was acknowledged before me this 31 day of January, 2008, by Steve Maestas manager, on behalf of said Holly SP, LLC.

Christina M. Rhoderick  
NOTARY PUBLIC  
My Commission Expires: 9/29/08



## **EXHIBIT "A"**

### Holly Place Legal Description

Lots numbered 14, 15, 18, & 19 in Block numbered Eighteen (18) of TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES, as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico, on April 24, 1936. LESS AND EXCEPTING therefrom property described in Warranty Deed filed June 16, 1997, recorded in Book 97-16, Page 1756, as Document No. 97060397, records of Bernalillo County, New Mexico.



**EXHIBIT "B"**

Paseo Place Legal Description

Lots 12, 13, 20, & 21 in Block numbered Eighteen (18) of TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES, as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico, on April 24, 1936.

**Exhibit "C"**

**Drainage Agreement Exhibit**

HOLLY AVENUE NE  
(60' R.O.W. PRESCRIPTIVE USE ROADWAY)

HOLLY AVENUE NE  
(80' R.O.W. PRESCRIPTIVE USE ROADWAY)

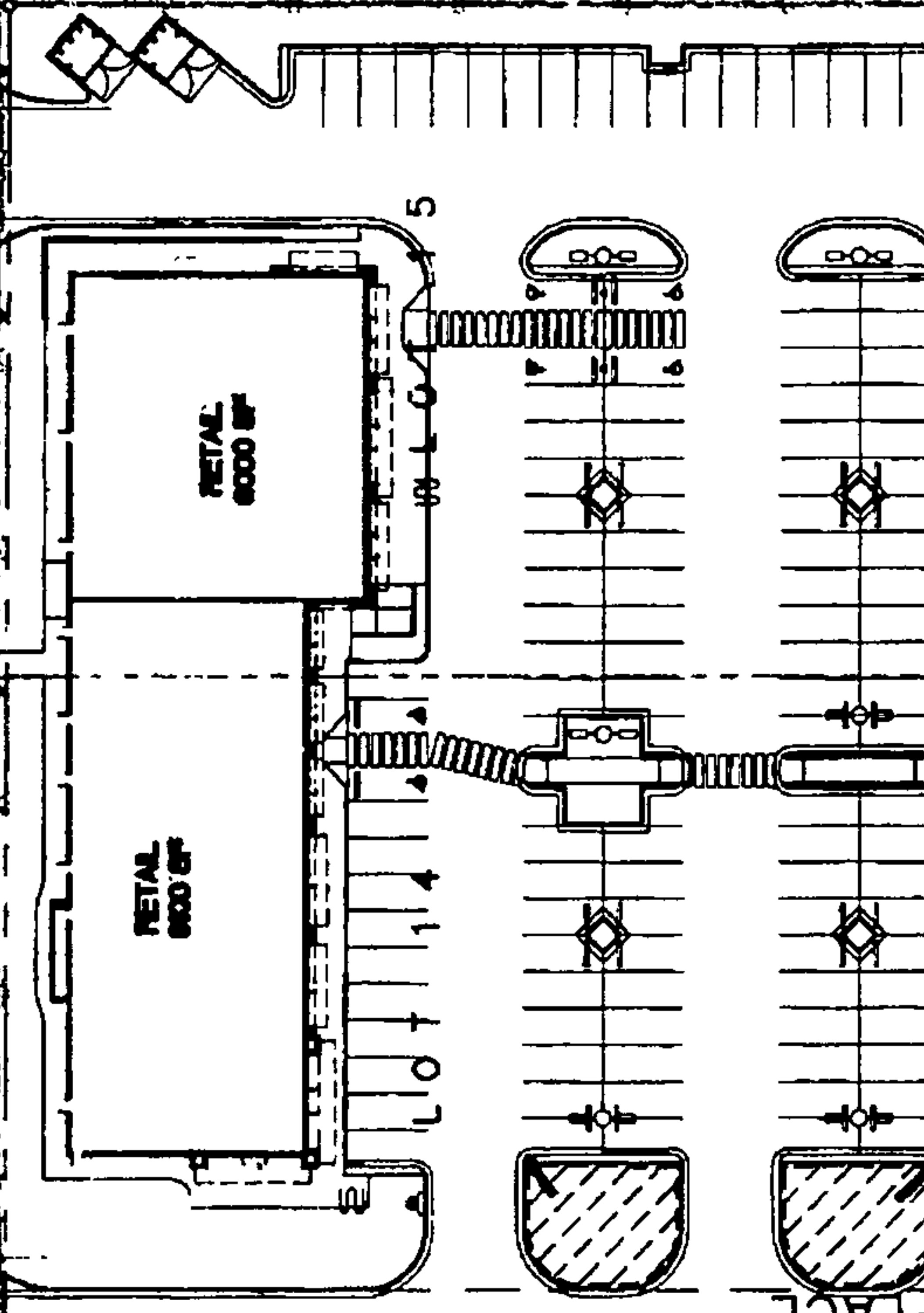
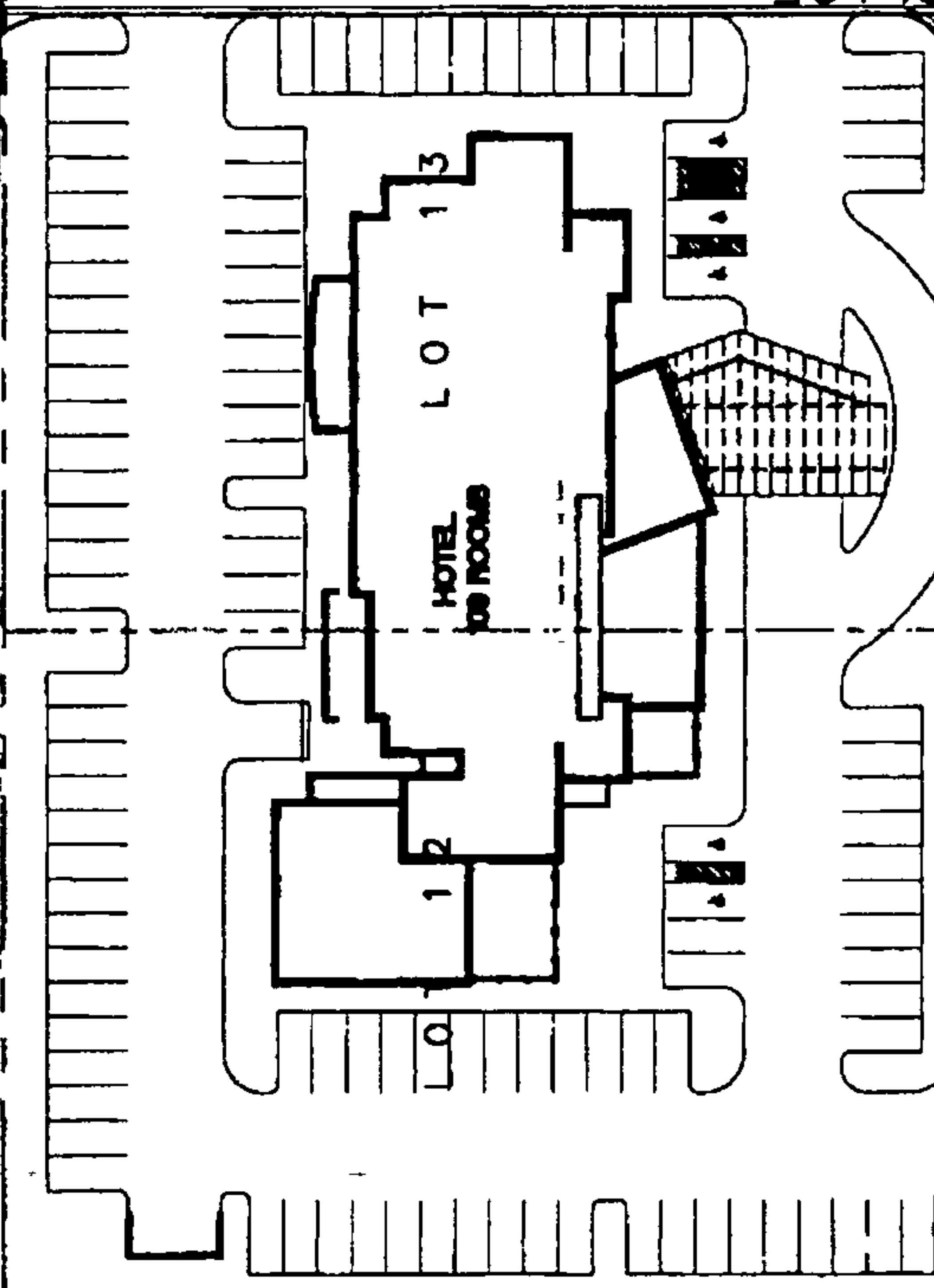
LOT 8 B

(FILED 4/08/1998 VOL. SEC. FOLIO 71)

BLOCK 18, TRACT A, UNIT B,  
NORTH ALBUQUERQUE ACRES

(FILED 8/22/1998 VOL. SEC. FOLIO 218)

LOT 8 A - 1

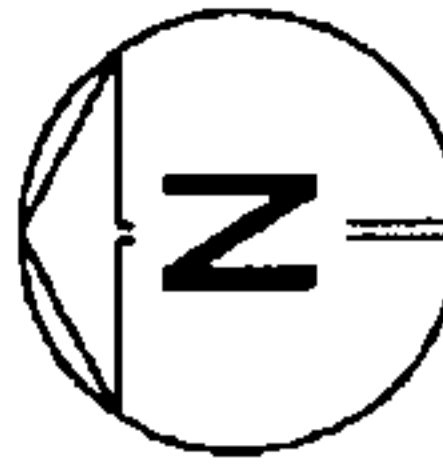


LOT 16-A BLOCK 18, TRACT A, UNIT B,  
NORTH ALBUQUERQUE ACRES

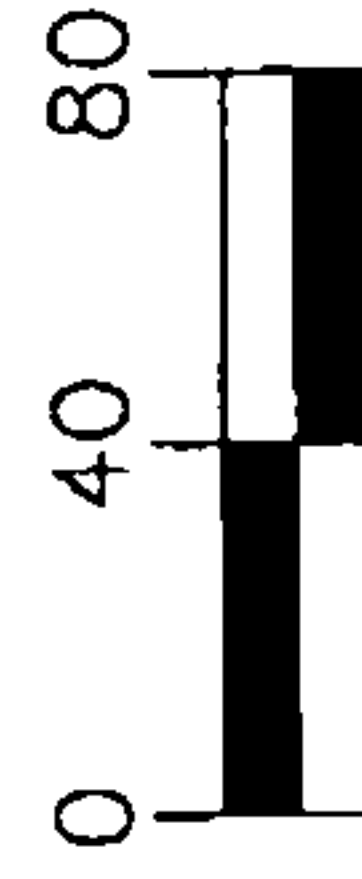
(FILED 2/25/1998 VOL. SEC. FOLIO 87)

PASEO DEL NORTE NE  
(PUBLIC R.O.W. VARIES)

PASEO DEL NORTE NE  
(PUBLIC R.O.W. VARIES)



SCALE



Approximate Location  
Detention Ponds

Drainage Agreement Exhibit-01/08/08  
Paseo Place & Holly Place  
Albuquerque, New Mexico

Conceptual Plan  
Subject to Change

**Exhibit “D”**

**Holly Place Grading & Drainage Plans, Report, and City Approval Letter**







- ## VAN POND OUTLET STRUCTURE



- 11 SHAPED CONC CHANNEL

[illegible]

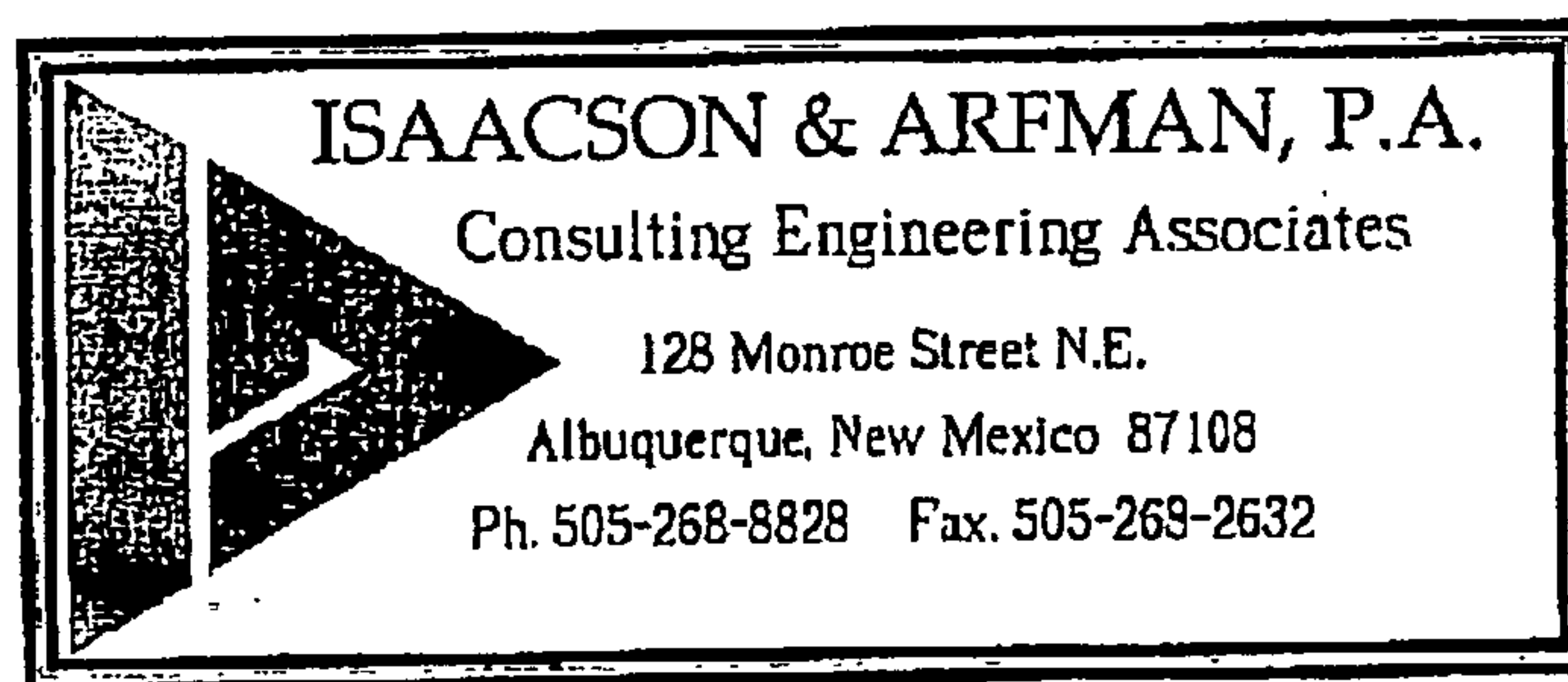
OCTOBER 26, 2007

# SUPPLEMENTAL INFORMATION

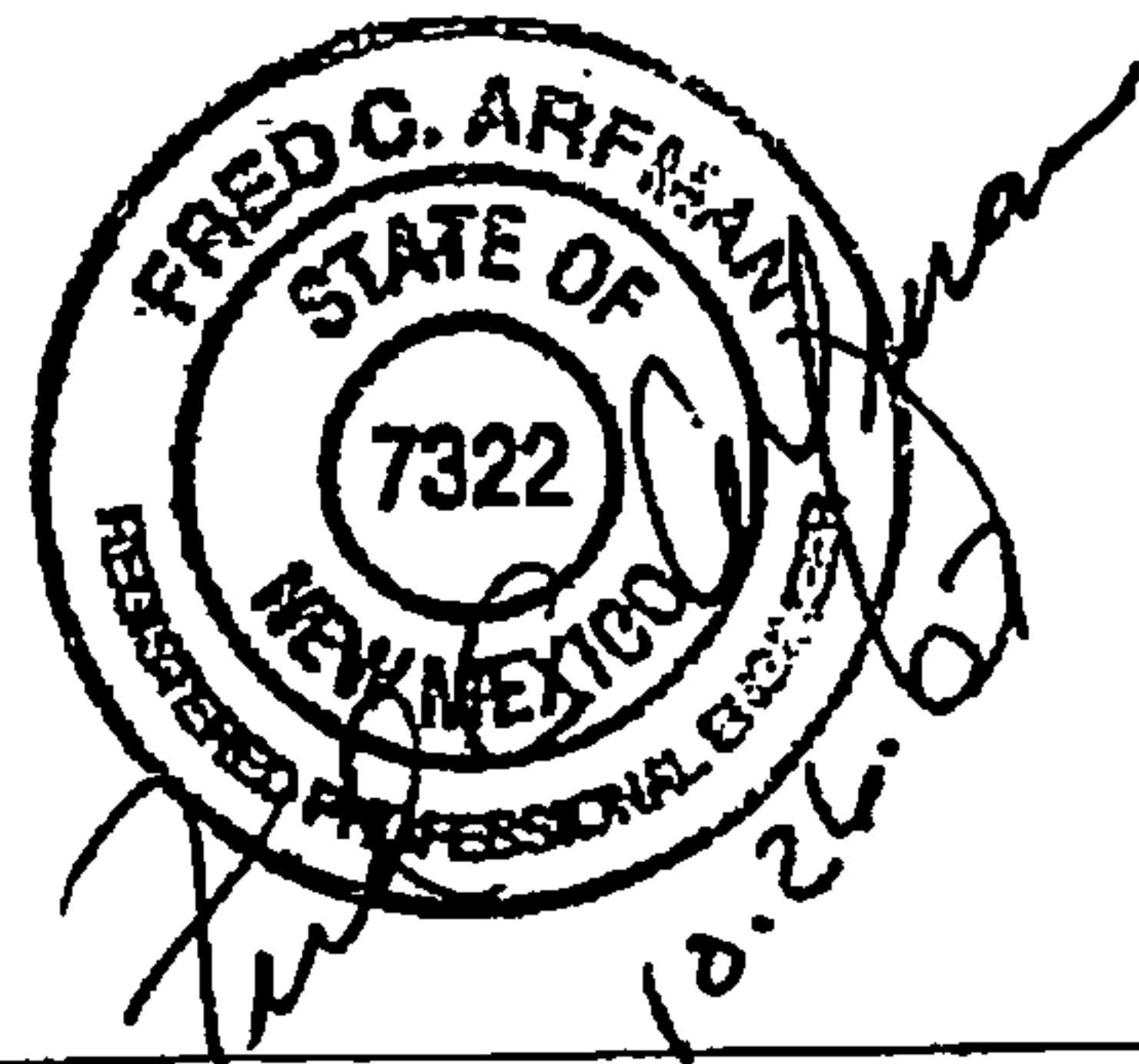
FOR

## HOLLY PLACE COMMERCIAL PHASE II

BY



Project No. 1435.2





## DRAINAGE ANALYSIS

The overall referenced PROPERTY included in this analysis consists of HOLLY PLACE COMMERCIAL (Lots 14A, 18 and 19A = 3.5 acres) and an ADJACENT COMMERCIAL site (Lots 12, 13, 20 and 21 = 3.5 acres). The PROPERTY is located on the south side of Holly Avenue west of San Pedro Blvd. – Zone Atlas Page C-18. Paseo del Norte borders the PROPERTY to the south, developed commercial property to the east and west and Holly Ave. to the north. The existing site slopes at an average of 3% to the northwest. It has been previously developed and currently, the majority of the site surface consists of deteriorated asphalt and gravel.

Legal description: HOLLY PLACE COMMERCIAL: Lots 14A, 18 and 19A BLOCK 18, TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES.

Legal description: ADJACENT COMMERCIAL: Lots 12, 13, 20 and 21 BLOCK 18, TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES.

Development: Phase I of HOLLY PLACE COMMERCIAL (Discount Tire - Lot 18) is currently under construction. This submittal referenced as Phase II will develop Lot 14A. The final portion of the Holly Place Commercial property, Lot 19A will be developed as Phase III. The ADJACENT COMMERCIAL portion will be developed by others. The purpose of including the ADJACENT COMMERCIAL is to provide all necessary ponding for all referenced lots on Lot 14A thus removing all detention requirements from the remaining properties.

The intent of this plan is to show:

- \* Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
- \* The extent of proposed site improvements, including buildings, walks and pavement.



- \* The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City of Albuquerque requirements for drainage management.
- \* The relationship of on-site improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

Pertinent information:

- PROPERTY is located within Floodzone 'X' – 'Areas determined to be outside the 500-year floodplain'.



The PROPERTY was previously developed. Approximately 75% of the PROPERTY consists of deteriorated asphalt and gravel with the remainder hard-packed earth. Per the calculations, the pre-existing discharge is 32.7 cfs.

EXISTING STATE			
Area of PROPERTY =	307534	SF	= 7.1 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 2.09 in.

Sub-basin Volume of Runoff (see formula above)

V360 = 53626 CF

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 32.7 cfs

TREATMENT	
A =	0%
B =	0%
C =	25%
D =	75%

- SAD #224, developed for Holly Avenue and approved in 1998 states that flows from PROPERTY have free discharge to Holly Ave. based on assumed developed land treatments of 10%A, 15%B, 10%C, 65%D. Total allowable discharge rate is 29.5 cfs.

ALLOWABLE DISCHARGE PER SAD #224			
Area of PROPERTY =	307534	SF	= 7.1 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 1.87 in.

Sub-basin Volume of Runoff (see formula above)

V360 = 47847 CF

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 29.5 cfs

TREATMENT	
A =	10%
B =	15%
C =	10%
D =	65%

- The fully developed PROPERTY (HOLLY PLACE COMMERCIAL and ADJACENT COMMERCIAL), estimating actual land treatment values of 0%A, 10%B, 5%C and 85%D will generate 33.2 cfs.

		PROPOSED DEVELOPED STATE	
Area of PROPERTY =	307534	SF	= 7.1 Ac.

The following calculations are based on Treatment areas as shown in table to the right

Sub-basin Weighted Excess Precipitation (see formula above)

Weighted E = 2.16 in.

Sub-basin Volume of Runoff (see formula above)

V360 = 55420 CF

Sub-basin Peak Discharge Rate: (see formula above)

Qp = 33.2 cfs

TREATMENT

A = 0%

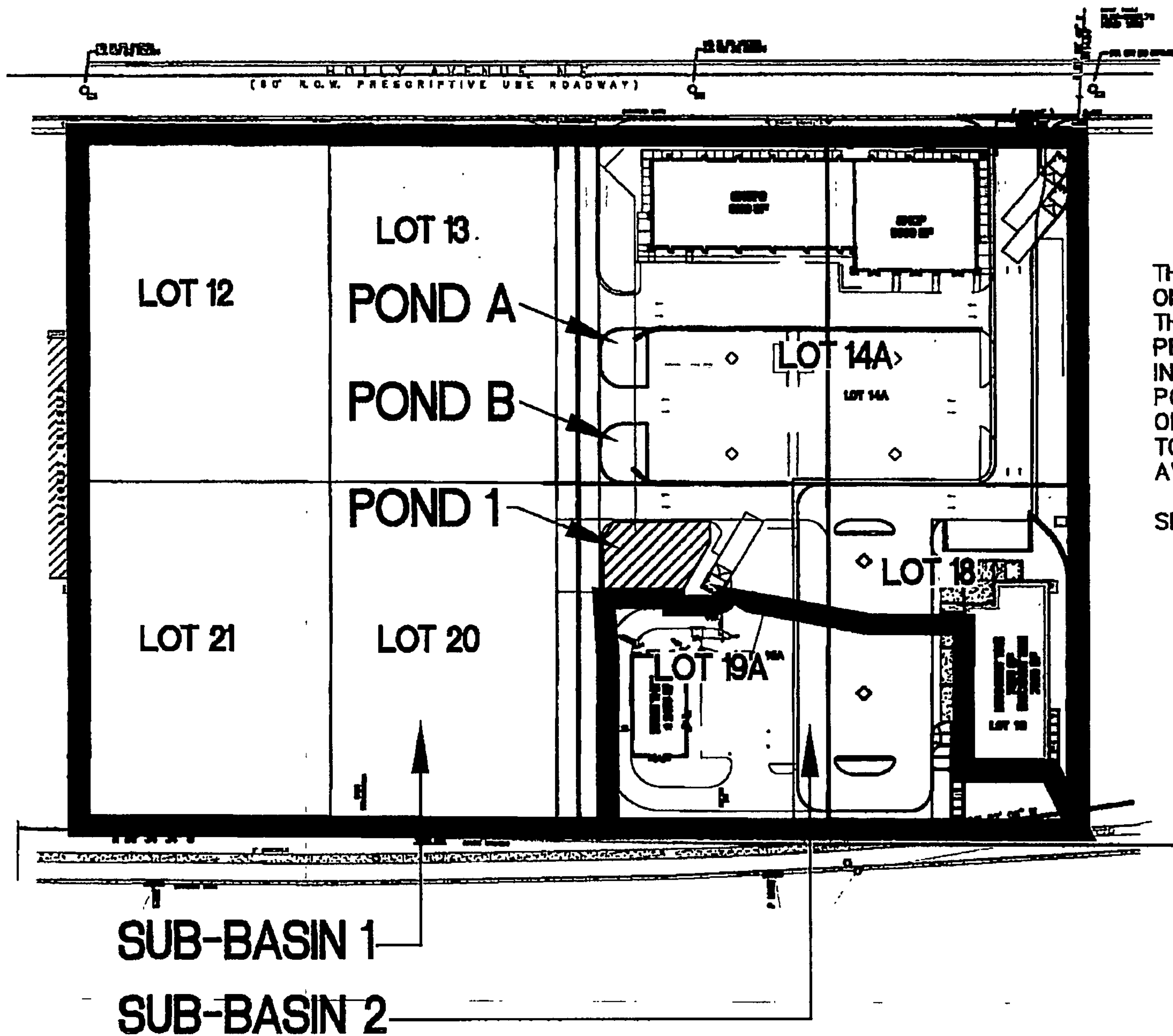
B = 10%

C = 5%

D = 85%

**33.2 cfs (fully developed discharge) – 29.5 cfs (allowable discharge) = 3.7 cfs to be detained.**





THE PONDS TO BE CONSTRUCTED ON LOT ARE SIZED TO DETAIN THE REQUIRED DISCHARGE TO PERMIT SUB-BASIN 1, WHICH INCLUDES LOTS 12, 13, 14A, A PORTION OF LOT 18, A PORTION OF LOT 19, LOT 20 AND LOT 21 TO FREE DISCHARGE TO HOLLY AVENUE N.E.

SEE ATTACHED CALCULATIONS

**SUB-BASIN / POND EXHIBIT**

## PROPOSED SOLUTION:

The fully developed PROPERTY will consist of two (2) drainage sub-basins (see SUB-BASIN / POND EXHIBIT).

Sub-Basin 1, which includes Lots 12, 13, 14a, a portion of Lot 18, a portion of Lot 19, Lot 20 and Lot 21 will generate 28.7 cfs to free discharge to Holly Avenue N.E..

SUB-BASIN 1			
Area of PROPERTY =	270894	SF	= 6.2 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)			
Weighted E	=	2.11	in.
Sub-basin Volume of Runoff (see formula above)			
V360	=	47610	CF
Sub-basin Peak Discharge Rate: (see formula above)			
Qp	=	28.7	cfs
TREATMENT			
A	=	0%	
B	=	10%	
C	=	10%	
D	=	80%	

4.629  
cfs/Ac

Sub-Basin 2, consisting of the majority of Lot 19A and a portion of Lot 18 will generate 4.0 cfs to be directed to the proposed detention ponds. The main pond will utilize a water quality inlet with a bleeder pipe to release the detained volume at a rate not to exceed 0.8 cfs in order to drain the pond within a 24-hour (max.) period.

SUB-BASIN 2			
Area of PROPERTY =	37243	SF	= 0.9 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)			
Weighted E	=	2.16	in.
Sub-basin Volume of Runoff (see formula above)			
V360	=	6711	CF
Sub-basin Peak Discharge Rate: (see formula above)			
Qp	=	4.0	cfs
TREATMENT			
A	=	0%	
B	=	10%	
C	=	5%	
D	=	85%	

The total discharge (100-year, 6-hour storm event) to Holly Ave. will be 28.7 cfs (Sub-Basin 1) + 0.8 cfs (Detention Pond controlled release) = 29.5 cfs = ALLOWABLE DISCHARGE RATE.

Per the attached hydrograph, the pond is required to detain a volume of 4891 cf.

Pond calculations show the main proposed pond, at a depth of 18", has a volume of

POND VOLUME		
CONTOUR	AREA	VOL (CF)
17.5	2965	
18.0	3100	1516
19.0	3358	3229
		0
Pond Volume		4745

Each of the minor landscape island ponds has a volume of

Pond A	Pond B	Volume (each pond)	
CONTOUR	CONTOUR	AREA	VOL (CF)
16.5	17.5	355	
17.0	18.0	926	320
			0
Pond Volume			320

For a total detained volume of  $4745 + 320 + 320 = 5385 \text{ CF} > 4891 \text{ CF}$  (required) OK

The outlet pipe will be 6" dia. at 0.5% slope with a discharge rate of 0.57 cfs to 1.21 cfs (see attached pond discharge line calculations).



# Hydrograph

<b>CALCULATIONS: 1435 Holly Place Commercial - Phase II : ='DPM Calculations'!C6</b>
<b>HYDROGRAPH FOR SMALL WATERSHED</b>
<b>DPM SECTION 22-2 * PAGE A-13/14</b>

Base time,  $t_B$ , for a small watershed hydrograph is,

$$t_B = (2.107 * E * AT / QP) - (0.25 * AD / AT)$$

Where

E	=	2.16 inches
AT	=	0.85 acres
AD	=	0.73 acres
QP	=	4.0 cfs

$t_B$	=	0.76 hours
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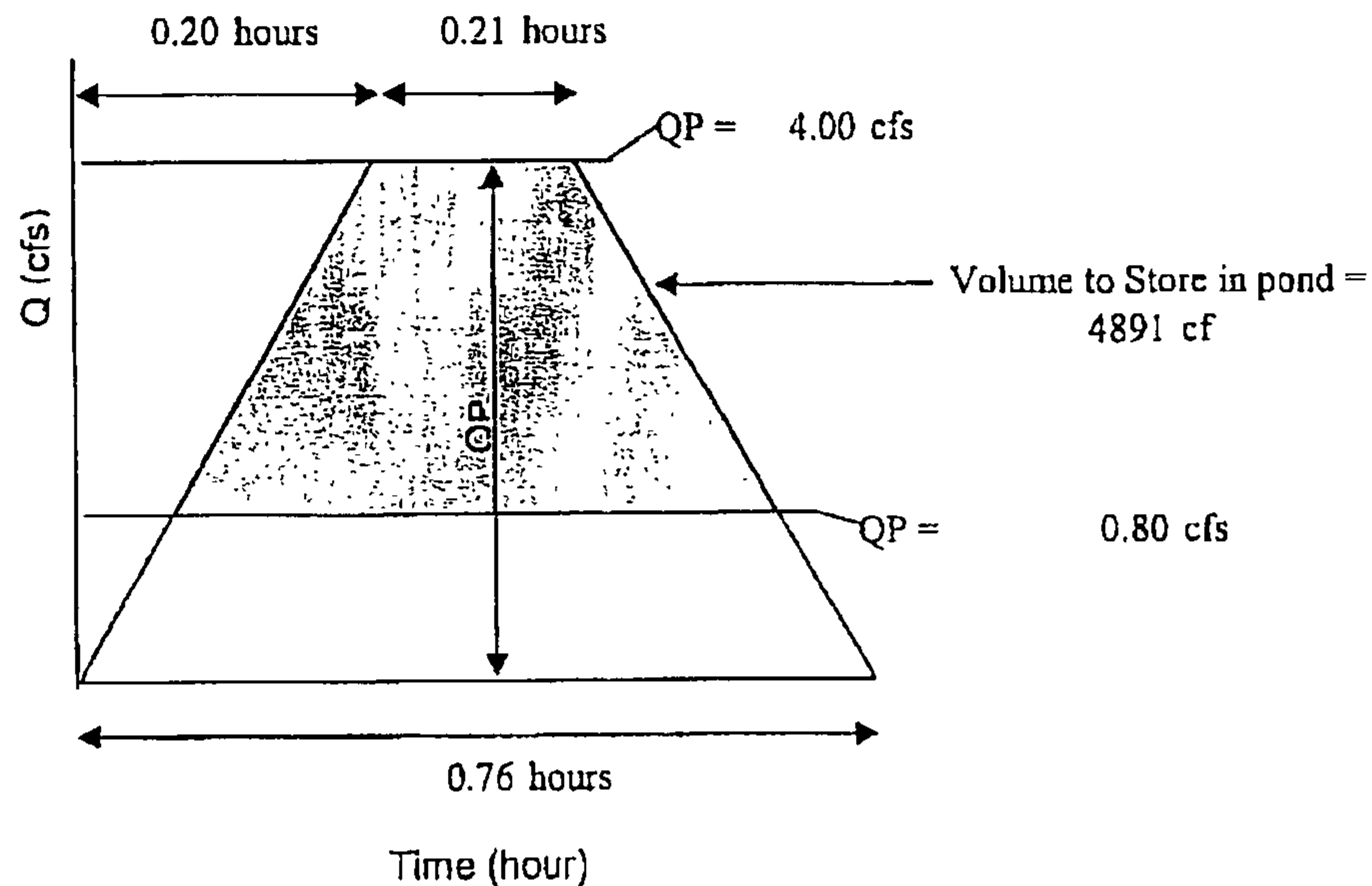
E is the excess precipitation in inches (from DPM TABLE A-8), QP is the peak flow, AD is the area (acres) of treatment D, and AT is the total area in acres. Using the time of concentration,  $t_C$  (hours), the time to peak in hours is:

$$t_P = (0.7 * t_C) + ((1.6 - (AD / AT)) / 12)$$

Where  $t_C$  = 0.20 hours

$$t_P = 0.20 \text{ hours}$$

Continue the peak for  $0.25 * AD / AT$  hours. When AD is zero, the hydrograph will be triangular. When AD is not zero, the hydrograph will be trapezoidal. see the graph below:



**INFLOW / OUTFLOW HYDROGRAPH**

6" DIA. CAPACITY (NO PRESSURE)  
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\academic\fmw\1435.fm2
Worksheet	Pond Discharge - 6"
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Full Flow Capacity

Input Data	
Mannings Coefficient	0.009
Channel Slope	0.005000 ft/ft
Diameter	6.00 In

Results		
Depth	0.50	ft
Discharge	0.57	cfs
Flow Area	0.20	ft <sup>2</sup>
Wetted Perimeter	1.57	ft
Top Width	0.00	ft
Critical Depth	0.39	ft
Percent Full	100.00	
Critical Slope	0.005648	ft/ft
Velocity	2.92	ft/s
Velocity Head	0.13	ft
Specific Energy	FULL	ft
Froude Number	FULL	
Maximum Discharge	0.62	cfs
Full Flow Capacity	0.57	cfs
Full Flow Slope	0.005000	ft/ft

NON-PRESSURIZED  
POND DISCHARGE  
LINE CONDITION  
 $Q = 0.57 \text{ cfs}$

6" DIA. POND DISCHARGE  
Worksheet for Pressure Pipe

Project Description	
Project File	c:\haestad\academic\fmw\1435.fm2
Worksheet	6" POND OUTLET PIPE
Flow Element	Pressure Pipe
Method	Hazen-Williams Formula
Solve For	Discharge

Input Data	
Pressure at 1	3.45 feet H2O
Pressure at 2	0.00 feet H2O
Elevation at 1	1.30 ft
Elevation at 2	0.00 ft
Length	258.00 ft
C Coefficient	150.0
Diameter	6.00 in

Results		
Discharge	1.2112	cfs
Headloss	4.75	ft
Energy Grade at 1	5.96	ft
Energy Grade at 2	1.21	ft
Hydraulic Grade at 1	4.75	ft
Hydraulic Grade at 2	0.00	ft
Flow Area	0.20	ft <sup>2</sup>
Wetted Perimeter	1.57	ft
Velocity	6.17	ft/s
Velocity Head	0.59	ft
Friction Slope	0.018410	ft/ft

PRESSURIZED POND  
DISCHARGE LINE

\* POND @ 100% CAPACITY  
 $Q = 1.21 \text{ cfs}$



# CITY OF ALBUQUERQUE



December 31, 2007

Fred C. Arfman, PE  
Isaacson & Arfman, PA  
128 Monroe St. NE.  
Albuquerque, NM 87108

**Re: Holly Place Phase III, San Pedro & Holly Ave NE**  
**Grading and Drainage Plan**  
**Engineer's Stamp dated 10/26/2007 (C18/D77)**

Dear Mr. Arfman,


Based upon the information provided in your submittal received 10-29-07, the above referenced plan is approved for Building Permit, Grading Permit and Paving Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

This project will also require a National Pollutant Discharge Elimination System (NPDES) permit. Inquiries regarding this permit should be directed to Sertil Kandar at 768-3645. In addition to submitting an NOI to the EPA and preparing a SWPPP, please send a copy of their SWPPP on a CD in .pdf format to Kathy Verhage with the Department of Municipal Development Storm Drainage Division at the following address.

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

If you have any questions, you can contact me at 924-3977.

Sincerely,

  
Rudy E. Rael, Associate Engineer  
Planning Department  
Development and Building Services

C: Dwayne Schmitz, DMD Street / Storm Maintenance  
CC: File

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov