City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 25, 2003

Sara Lavy, P.E.
Tierra West, LLC
8509 Jefferson NE
Albuquerque, New Mexico 87113

RE: ONE PRESIDENTIAL PLAZA TR. E-2-A (E-17/D55B)
(6310, 6300, and 6400 Jefferson NE)
ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY
ENGINEERS STAMP DATED 11/11/2002
ENGINEERS CERTIFICATION DATED 3/18/2003

Dear Sara:

Based upon the information provided in your Engineers Certification submittal dated 3/20/2003, and based upon the approval of the SO19 by the City's Storm Drainage Maintenance inspector, the above referenced site is approved for Permanent Certificate of Occupancy.

If I can be of further assistance, please contact me at 924-3981.

Sincerely,

Teresa A. Martin
Hydrology Plan Checker
Development & Building Services Division
BB

C: Certificate of Occupancy Clerk, COA
drainage file
approval file

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

November 19, 2002

Ron Bohannan
Tierra West
8509 Jefferson NE
Albuquerque, New Mexico 87113

RE: Grading and Drainage Report for Lot E-2-A Presidential Plaza, 6300, 6310, and 6400 Jefferson NE (E17=D55B) Dated November 11, 2002

Dear Mr. Bohannan:

The above referenced drainage plan is approved for building permit and for SO#19. Sign-off by the City field inspector for the SO#19 along with the engineer's certification will be required for Hydrology final Certificate of Occupancy release. Per your comments in your November 12, 2002 letter the first C.O. will require the construction of the detention ponds and the asphalt parking lot.

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

Sincerely,

Carlos A. Montoya
City Floodplain Adm.

C: Matt Cline w/attachments
Pam Lujan, Excavation Permits

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 7, 2003

Ron Bohannan
Tierra West, LLC
8509 Jefferson, NE Suite D
Albuquerque, New Mexico 87113

RE: Grading Plan For USDA Building (E17-D37) Dated January 28, 2003

Dear Mr. Bohannan:

The above referenced drainage plan received January 31, 2003 is approved for Grading Permit approval.
Upon completion of the project please certify the grading per the DPM. Sorry about the confusion but we did receive a complaint and I know this was a very sensitive area.

If you have any questions please call me at 924-3982.

Sincerely,

Carlos A. Montoya
City Floodplain Administrator

DRAINAGE REPORT

for

Lot E-2-A One Presidential Plaza

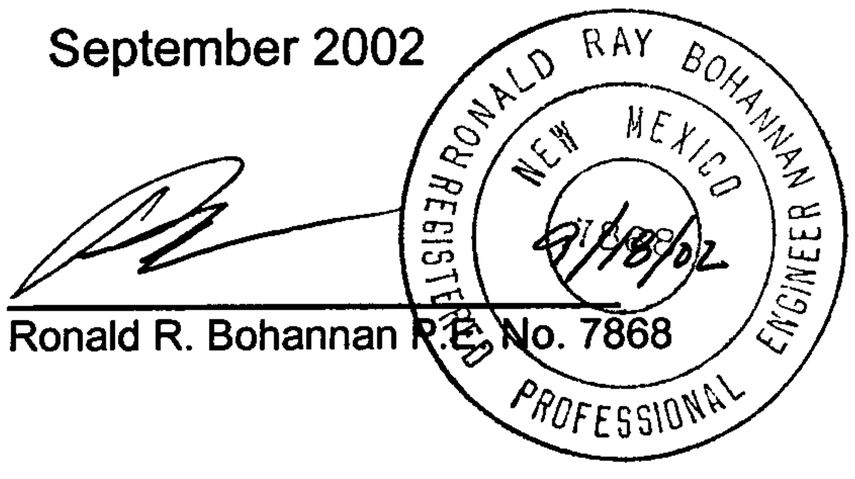
Prepared by

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

Prepared for

Mike Marra
Builders Investment Company of NM, Ltd.
7007 Wyoming Blvd, Suite D-6
Albuquerque, New Mexico 87109

September 2002



Ronald R. Bohannan P.E. No. 7868

Location

The site is identified as Lot E-2-A of One Presidential Plaza. It is located on the southeast corner of Jefferson Blvd and Presidential Drive. Office uses are proposed for the site, which is zoned IP. The site is shown on Zone Atlas Map E-17 and contains approximately 2.43 acres. The purpose of this report is to provide the drainage analysis and management plan for a proposed retail development.

Existing Drainage Conditions

The site is currently undeveloped. The natural slope of the site is from east to west towards Jefferson Blvd. There is one on-site basin with an undeveloped flow rate of 5.48 cfs. Osuna and Presidential Drive prevent any flows from entering the site from the north or west. The natural topography of the site prevents any flows from entering the site from the south.

There is one offsite basin that impacts the site. It is located east ofthe site in the I-25 right-of-way with a total flow rate of 29.0 cfs. This offsite flow is an illegal diversion of flow around the USDA building located to the south (see attached letter in Appendix A). The offsite flows should have passed through the southern site, but were instead graded to go around onto the adjoining tract. We are currently working with the City Engineer to remedy this situation. However, until the southern property owner takes action the offsite flow will be treated as an existing flow and allowed to pass unrestricted through the site to the adjacent streets.

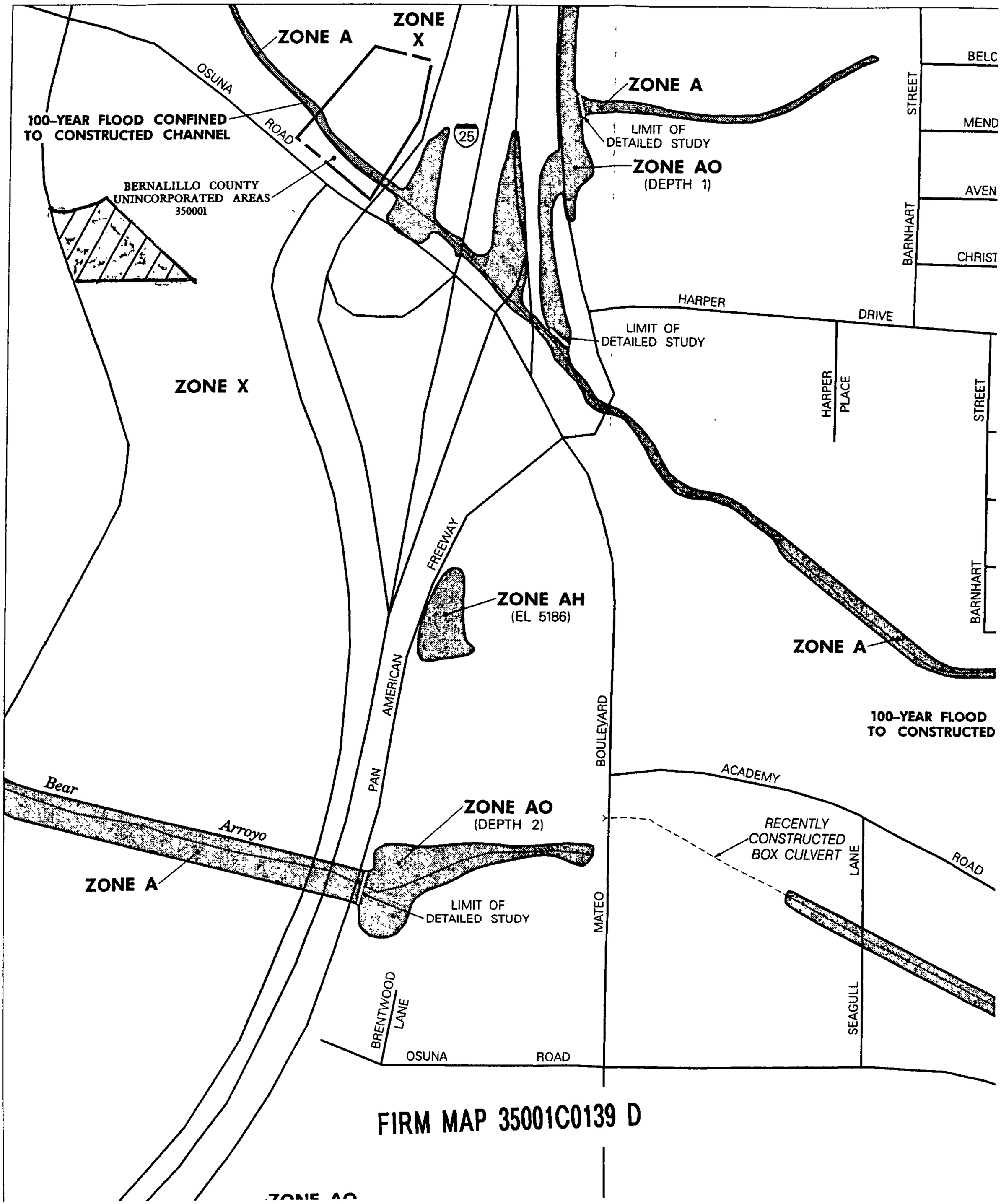
FIRM Map and Soil Conditions

The site is located on FIRM map 35001C0139 D as shown on the attached excerpt. The map shows that the site does not lie within any 100-year flood plains.

The site contains one soil from the Soil Conservation Service Soil Survey of Bernalillo County. The Embudo gravelly fine sandy loam has medium runoff and the hazard of water erosion is moderate.

106°35'37"

'22"



FIRM MAP 35001C0139 D

On-Site Drainage Management Plan

There is a master plan for the One Presidential Plaza site titled "Master Development Plan- One Presidential Plaza" by Bohannan-Huston (E17/D55). According to this plan Lot E-2-A is part of Basin E on the Master Plan. Basin E is allowed to discharge directly to the adjacent streets and the flows will be conveyed to Osuna Road. There are severe restrictions placed on the site by the report.

The offsite flows of 29.0 cfs will be conveyed via an asphalt channel (velocity 5.52 fps) to Presidential Drive. The channel will be removed in the future when the illegal diversion is rectified.

The site has been divided into three basins. Basins 1 and 2 consist of the majority of the site, have a total flow of 8.78 cfs and drain to the three new ponds located on-site. The three new on-site ponds will act as one pond connected by 8" PVC pipes. Basin 3 with a developed flow of 1.22 cfs will drain to the existing asphalt roadway (existing access easement), located south of the site. The adjacent site has three detention ponds that restrict the developed flows (E17/D37). Basin 3 consists of the asphalt drive aisle, a small parking area and adjacent landscaping.

10-Year Storm

During the 10-year storm, Osuna must meet the "one lane dry" requirement. According to the Master Plan, Osuna does not meet this requirement. In order to not exacerbate the situation, the discharge during the 10-year storm has been limited to the existing undeveloped flow rate for the site. Consequently, Basin E is allowed a discharge of 0.27 cfs/acre during the 10-year storm. This is a total allowable discharge during a 10-year storm of 0.66 cfs (2.43*0.27=0.66). The site will discharge 0.56 cfs during the 10-year event, which does not exceed the allowable flow.

100-Year Storm

During a 100-year storm the site has an allowable discharge of 4.06 cfs/acre. Therefore, the total allowable discharge from the site will be 9.87 cfs (2.43*4.06=9.87). Pond 1 will have a overflow spillway for the 100-year storm in the curb on the west side of the site. The total developed 100-year flow from the site is 9.58 cfs and is less than the allowable of 9.87 cfs.

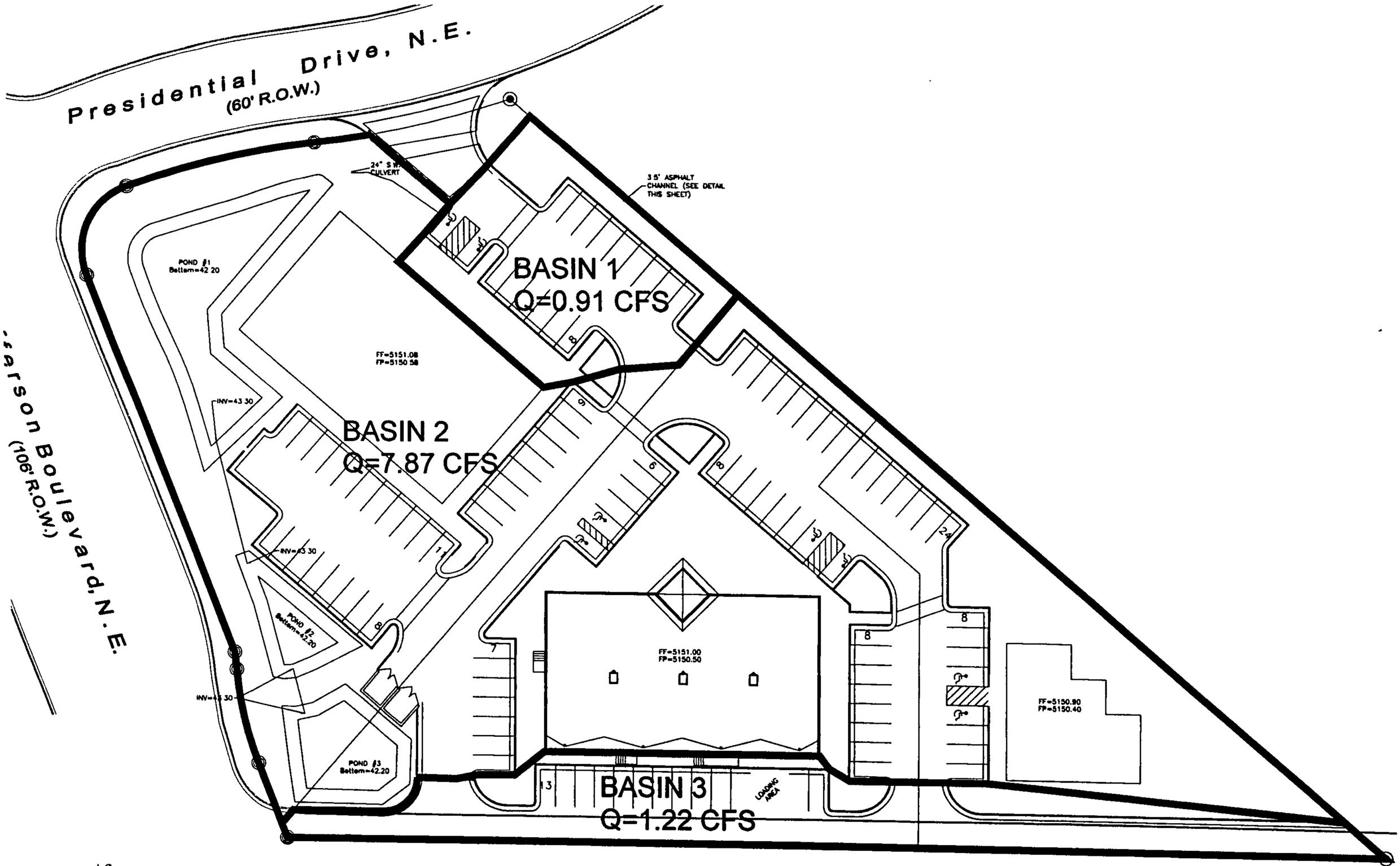
Calculations

The following is an explanation of the storm sewer and pond calculations. The pond capacity was established using AHYMO in accordance with DPM criteria. The stage-storage-discharge charts for the ponds was developed using a spreadsheet and can be found in the "Ponding Calculations" section of the report. The discharge rate from the pond is calculated using the orifice equation. The small orifice size required for Pond 1 will be obtained by using a 4.75" orifice plate on a 6" pipe. This will limit the discharge from the pond to the allowable rate.

Summary

There are three proposed ponds on the site. These ponds will limit the 10-year storm to the allowable discharge of 0.66 cfs. During the 100-year storm, the ponds will overflow to Jefferson Blvd. The total discharge from the site will be 9.58 cfs, which is less than the allowable discharge of 9.87 cfs.

No public infrastructure is required for this project. The connections from the pond to the public street will be made with an SO #19 permit.



BASIN AND POND EXHIBIT

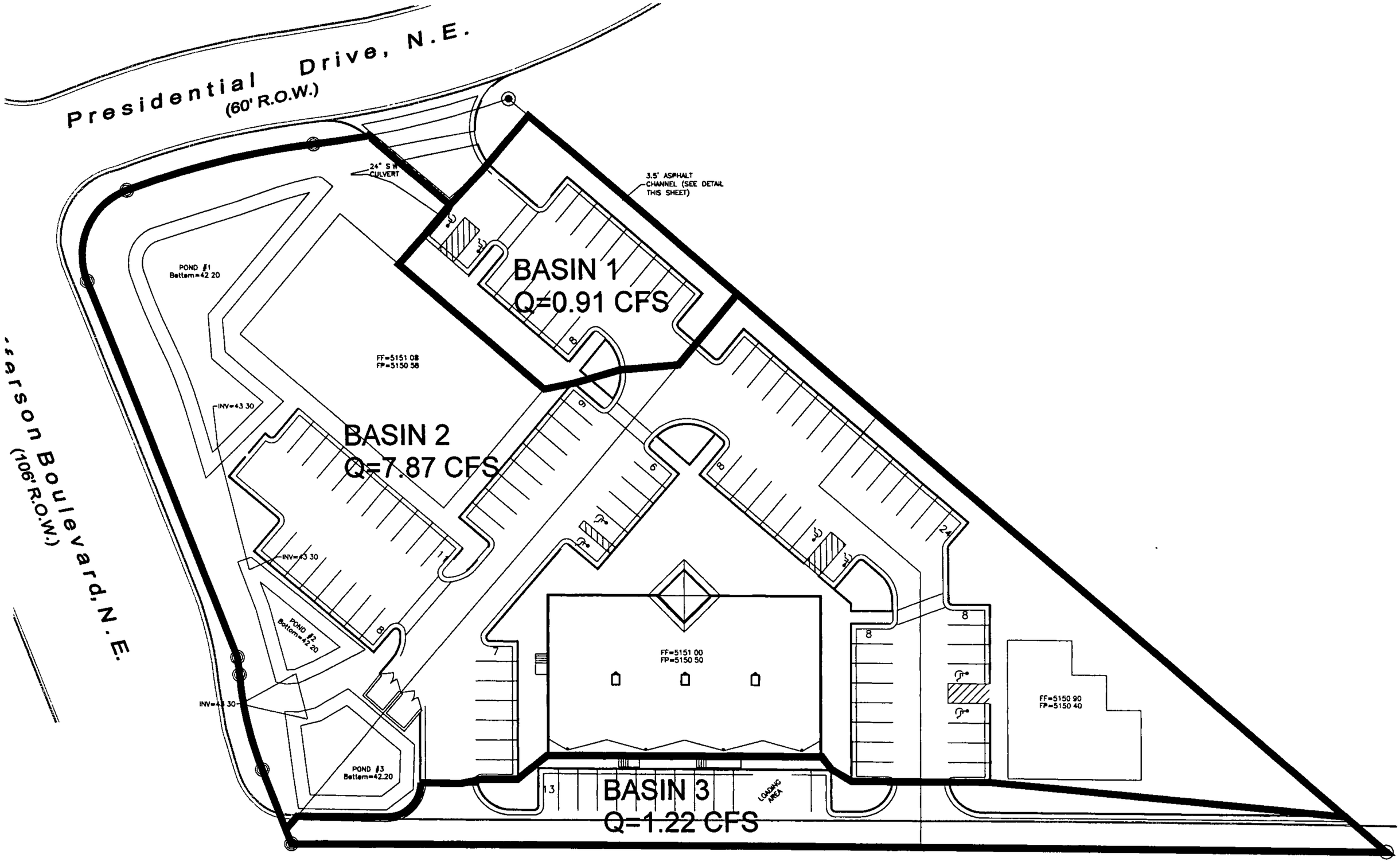
Runoff Calculations

Depth (Inches)		
Zone 2	100-Year	10-Year
	2.01	1.34
	2.35	1.37
	2.75	1.83
	3.30	2.20

Land Treatments				
Basin	A (%)	B (%)	C (%)	D (%)
1	0	20	0	80
2	0	20	0	80
3	0	20	0	80

Basin Areas			
Basin	Area (sf)	Area (acre)	Area (mi^2)
1	9334.51	0.2143	0.000335
2	82403.83	1.8917	0.002956
3	12646.44	0.2903	0.000454
Total	104384.78	2.3963	0.003744

Runoff Results				
Basin	Q-100 cfs	Q-10 cfs	V-100 ac-ft	V-10 ac-ft
1	0.91	0.57	0.039	0.024
2	7.87	4.98	0.342	0.211
3	1.22	0.77	0.053	0.032
Total	10.00	6.32	0.434	0.267



BASIN AND POND EXHIBIT

VOLUME CALCULATIONS

POND

Ab - Bottom Of The Pond Surface Area
At - Top Of The Pond Surface Area
D - Water Depth
Dt - Total Pond Depth
C - Change In Surface Area / Water Depth

Volume = Ab * D + 0.5 * C * D^2
C = (At - Ab) / Dt

	Pond 1	Pond 2	Pond 3
Bottom Area	2,758.09	508.55	1283.54
Top Area	4,831.91	1362.74	2247.15
Depth	1.50	1.5	1.5
C	1382.55	569.46	642.41

ACTUAL ELEV.	DEPTH (FT)	VOLUME (AC-FT)	Q (CFS)
42.2	0	0	0.0000
42.70	0.50	0.0597	0.3257
43.20	1.00	0.1342	0.5307
43.70	1.50	0.2237	0.6761

<u>Orifice Equation</u>
Q = CA SQRT(2gH)

C =	0.6
Diameter (in)	4.75
Area (ft^2)=	0.123
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow

100-Year Overflow Weir

Weir Equation:

$$Q = CLH^{3/2}$$

Q= 9.87 cfs
C = 2.95
H = 0.25 ft
L = Length of weir

$$L = \frac{9.87}{2.95 * 0.25^{3/2}}$$

L = 26.77 ft
Use 26.0 feet for length of weir (Q=9.58 cfs)

Curb Cut to Pond #1

Weir Equation:

$$Q = CLH^{3/2}$$

Q= 7.87 cfs
C = 2.95
H = 0.50 ft
L = Length of weir

$$L = \frac{7.87}{2.95 * 0.50^{3/2}}$$

L = 7.55 ft
Use 7.75 feet for length of weir

Channel Capacity

	Top Width	Bottom Width	Depth	Area	WP	R	Slope	Q Provided	Q Required	Velocity
	(ft)	(ft)	(ft)	(ft^2)	(ft)		(%)	(cfs)	(cfs)	(ft/s)
Channel	3.5	3.5	1.5	5.25	6.50	0.8076923	0.9	37.86	29.00	5.52

Manning's Equation:

Q = 1.49/n * A * R^(2/3) * S^(1/2)

A = Area

R = A/WP

S = Slope

n = 0.017

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02a RUN DATE (MON/DAY/YR) =09/05/2002
INPUT FILE = A:POND.TXT USER NO.= AHYMO-I-9702a0100011K-SH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION	
START										TIME=	.00
RAINFALL TYPE= 2										RAIN24=	1.830
COMPUTE NM HYD	100.10	-	1	.00034	.57	.024	1.33530	1.500	2.669	PER IMP=	80.00
COMPUTE NM HYD	100.20	-	2	.00296	4.98	.211	1.33530	1.500	2.631	PER IMP=	80.00
COMPUTE NM HYD	100.30	-	3	.00045	.77	.032	1.33530	1.500	2.660	PER IMP=	80.00
ADD HYD	200.00	1& 2	4	.00329	5.55	.234	1.33515	1.500	2.635		
ROUTE RESERVOIR	501.00	4	1	.00329	.56	.234	1.33376	2.150	.265	AC-FT=	.151
RAINFALL TYPE= 2										RAIN24=	2.750
COMPUTE NM HYD	100.10	-	1	.00034	.91	.039	2.16927	1.500	4.227	PER IMP=	80.00
COMPUTE NM HYD	100.20	-	2	.00296	7.87	.342	2.16927	1.500	4.160	PER IMP=	80.00
COMPUTE NM HYD	100.30	-	3	.00045	1.22	.053	2.16927	1.500	4.211	PER IMP=	80.00
FINISH											

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02a RUN DATE (MON/DAY/YR) =09/05/2002
INPUT FILE = A:EX.TXT USER NO.= AHYMO-I-9702a0100011K-SH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION	
START										TIME=	.00
RAINFALL TYPE= 2										RAIN24=	1.830
COMPUTE NM HYD	100.10	-	1	.00034	.20	.005	.27848	1.500	.933	PER IMP=	.00
COMPUTE NM HYD	100.20	-	2	.00296	1.74	.044	.27848	1.500	.918	PER IMP=	.00
COMPUTE NM HYD	100.30	-	3	.00045	.27	.007	.27848	1.500	.928	PER IMP=	.00
RAINFALL TYPE= 2										RAIN24=	2.750
COMPUTE NM HYD	100.10	-	1	.00034	.50	.014	.77774	1.500	2.313	PER IMP=	.00
COMPUTE NM HYD	100.20	-	2	.00296	4.31	.123	.77774	1.500	2.278	PER IMP=	.00
COMPUTE NM HYD	100.30	-	3	.00045	.67	.019	.77774	1.500	2.300	PER IMP=	.00
FINISH											

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Planning Department
Transportation Development Services Section

March 19, 2003

Sara Lavy, P.E.
8509 Jefferson NE
Albuquerque, NM 87113

Re: Certification Submittal for Final Building Certificate of Occupancy for
One Presidential Plaza Office Complex, [E-17/D55B]
6310, 6300, & 6400 Jefferson NE
Engineer's Stamp Dated 03/18/03

Dear Mr. Lavy:

The TCL / Letter of Certification submitted on March 18, 2003 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

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

c: Engineer
Hydrology file
CO Clerk

TIERRA WEST, LLC

8509 Jefferson NE
Albuquerque, NM 87113

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

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

March 18, 2003

Mrs. Terri Martin
Development and Building Services
Public Works Department
PO Box 1293
Albuquerque, NM 87103

RE: Final Traffic Control Plan Certification for Certificate of Occupancy
One Presidential Plaza Office Complex
6310, 6300 and 6400 Jefferson Boulevard, NE

Dear Mrs. Martin:

Tierra West, LLC requests Final Certification of the approved Traffic Control Layout for the One Presidential Office Complex. Enclosed is the As-Built Traffic Control Layout (TCL) and Information Sheet for the site. Parking lot striping, paving and sidewalk construction is complete. Field verification of the TCL was completed by our office and is in substantial compliance with the approved Plan. We are, therefore, requesting Final Certification of the Site Plan for Certificate of Occupancy.

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

Sincerely,

Sara Lavy, PE

Enclosure/s

cc: Steve Haley
Mike Marra

JN: 220060
SL/rw

2002 220060 Final CO traffic02122003.doc