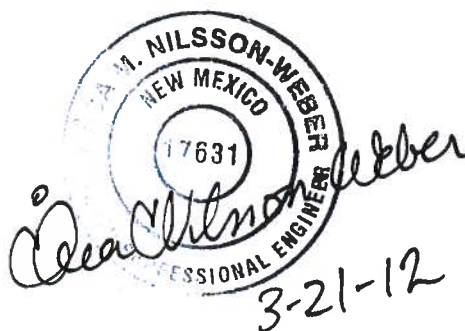


MARCH 21, 2012

SUPPLEMENTAL INFORMATION
FOR
LOS DURANES COMMUNITY CENTER

BY



IA Project No. 1908

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates



Thomas O. Isaacson, PE & LS
Fred C. Arfman, PE
Asa Nilsson-Weber, PE



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

PROJECT TITLE: Los Duranes Community Center ZONE MAP/DRG. FILE # H-12
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: A portion of Los Duranes Park, Albuquerque, NM
CITY ADDRESS: _____

ENGINEERING FIRM: ISAACSON & ARFMAN, PA CONTACT: Asa Weber
ADDRESS: 128 MONROE NE PHONE: 268-8828
CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87108

OWNER: City of Albuquerque CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

ARCHITECT: Greer Stafford CONTACT: Stephen Williams
ADDRESS: _____ PHONE: 821-0235
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: Cartesian Surveys Inc. CONTACT: Will Plotner, Jr.
ADDRESS: _____ PHONE: 896-3050
CITY, STATE: Rio Rancho, NM ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
 DRAINAGE REPORT
 DRAINAGE PLAN 1st 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 CERT (DRB S.P.)
 ENGINEER/ARCHITECT CERT (AA)
 OTHER (SPECIFY) _____

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: Asa Weber DATE: 3/20/2012
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 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.

CALCULATIONS: 1908 Los Duranes Community Center : March 19, 2012

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE

AREA OF SITE: 111623 SF = 2.6

100-year, 6-hour

HISTORIC FLOWS:

DEVELOPED FLOWS:

EXCESS PRECIP:

	Treatment SF	%
Area A =	0	0%
Area B =	22325	20%
Area C =	27906	25%
Area D =	61393	55%
Total Area =	111623	100%

	Treatment SF	%
Area A =	0	0%
Area B =	0	13%
Area C =	0	20%
Area D =	75005	67%
Total Area =	111623	100%

Precip. Zone	2
E _A	= 0.53
E _B	= 0.78
E _C	= 1.13
E _D	= 2.12

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$$

must have areas

Historic E =	1.60 in.	Developed E =	1.75 in.
--------------	----------	---------------	----------

On-Site Volume of Runoff: V₃₆₀ = E * A / 12

Historic V ₃₆₀ =	14925 CF	Developed V ₃₆₀ =	16258 CF
-----------------------------	----------	------------------------------	----------

On-Site Peak Discharge Rate: Q_p = Q_{pA}A_A + Q_{pB}A_B + Q_{pC}A_C + Q_{pD}A_D / 43,560

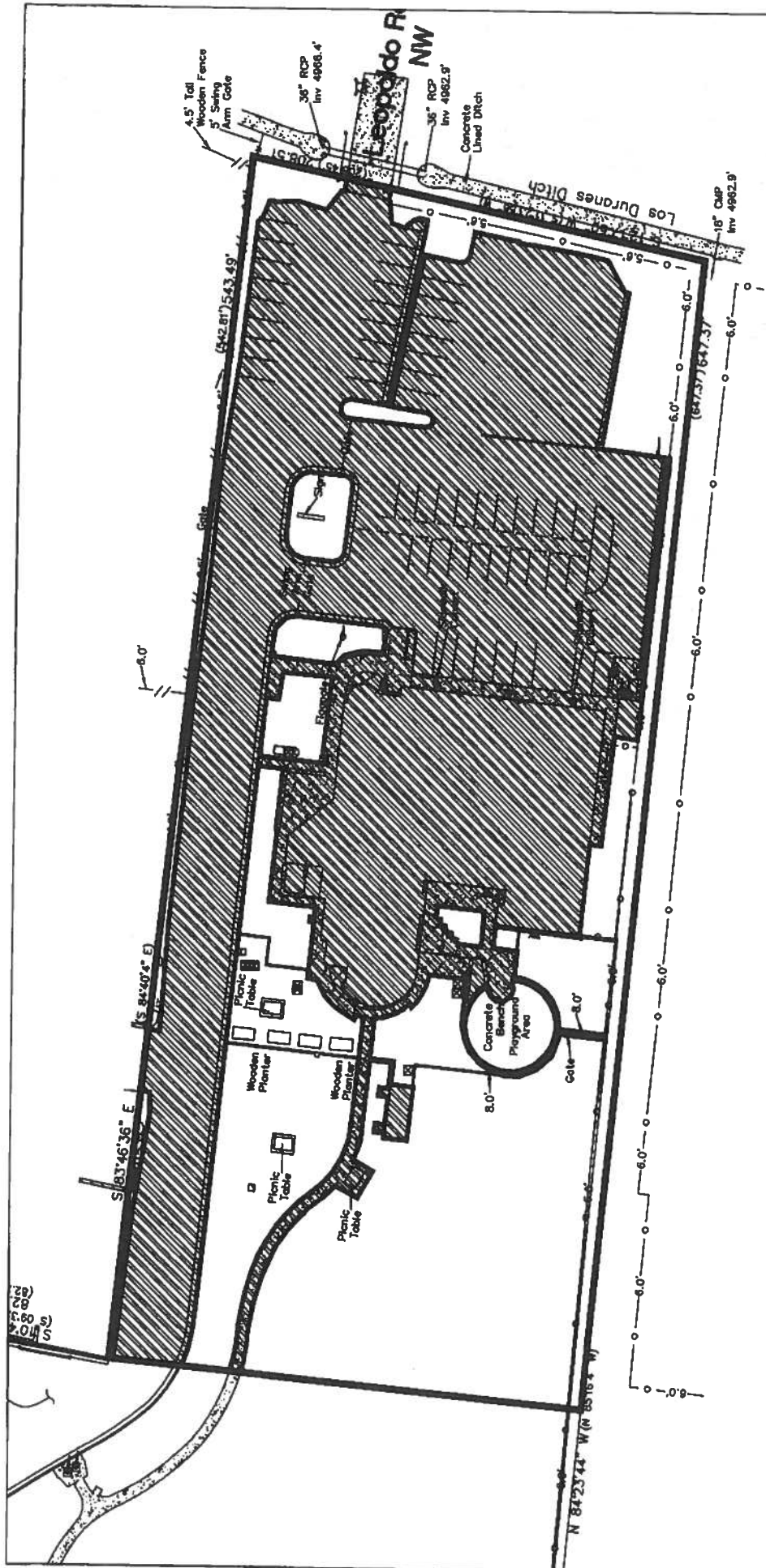
For Precipitation Zone 2

Q _{pA} =	1.56	Q _{pC} =	3.14
Q _{pB} =	2.28	Q _{pD} =	4.70

Must show how he ponds the difference

Historic Q _p =	9.8 CFS	Developed Q _p =	10.4 CFS
---------------------------	---------	----------------------------	----------

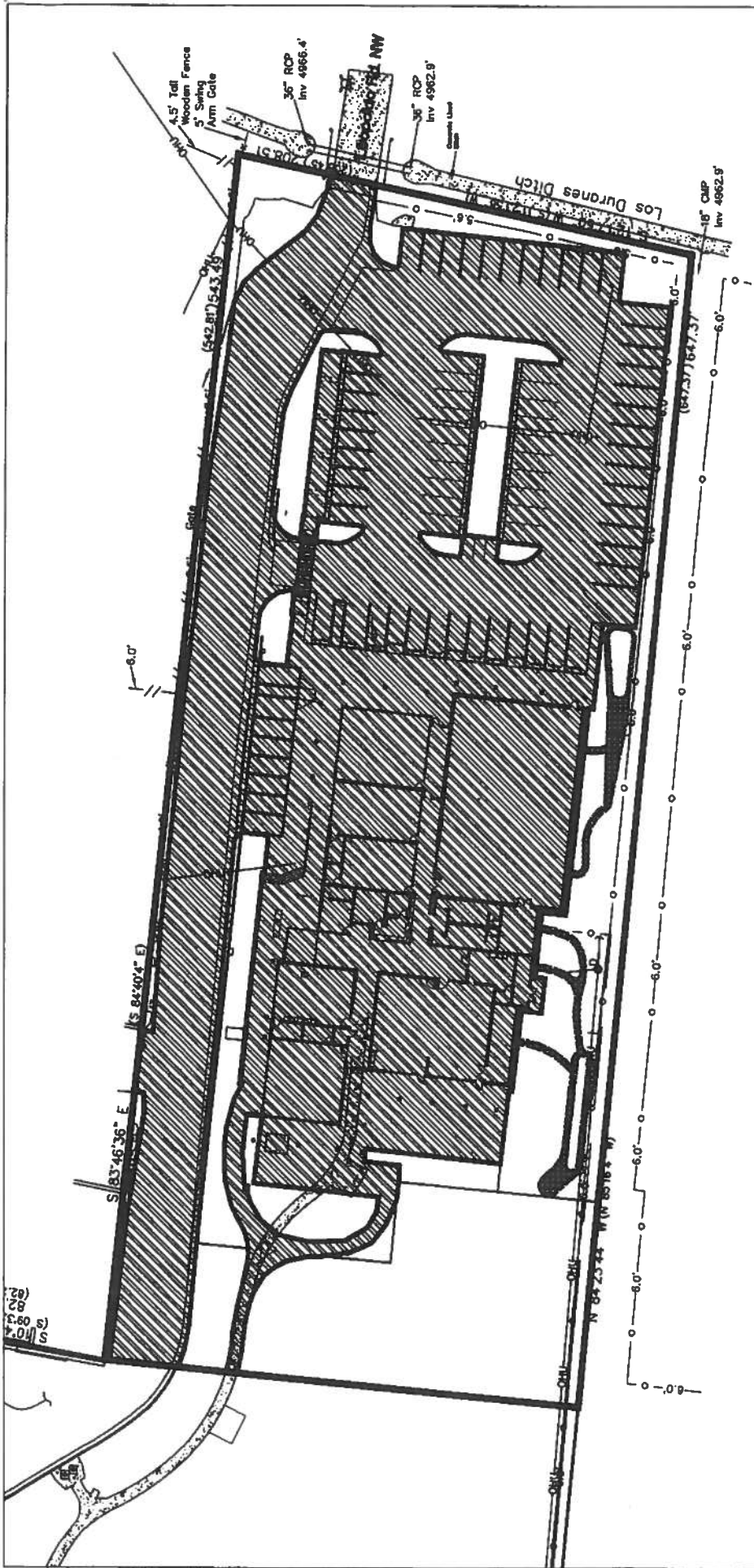
*- Pond calc's
- Ponds labeled*



EXISTING IMPERVIOUS AREA

ISAACSON & ARFMAN, P.A.
 Consulting Engineering Associates
 128 Monroe Street N.E.
 Albuquerque, New Mexico 87108
 Ph. 505-268-8828 www.iactivil.com





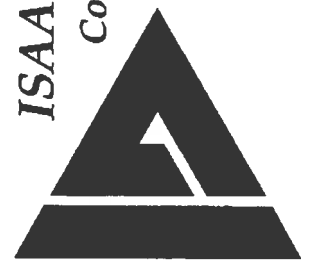
ISAACSON & AREFMAN, P.A.

Consulting Engineering Associates

128 Monroe Street N.E.

Albuquerque, New Mexico 87108

Ph. 505-268-8828 www.iacivil.com



PROPOSED IMPERVIOUS AREA

