CITY OF ALBUQUERQUE



November 21, 2006

Mr. J. Arthur Blessen, PE J. ARTHUR BESSEN ENGINEERING 11930 Menaul Blvd. NE, Suite 109 Albuquerque, NM 87112

Re: NORTH UNSER VET CLINIC

5747 Calle Perro NE

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

Engineer's Stamp dated 10/26/2005 (A-11/D7A)

Certification dated 11/19/2006

Dear Art,

P.O. Box 1293

Based upon the information provided in your submittal received 11/20/2006, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

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

New Mexico 87103

www.cabq.gov

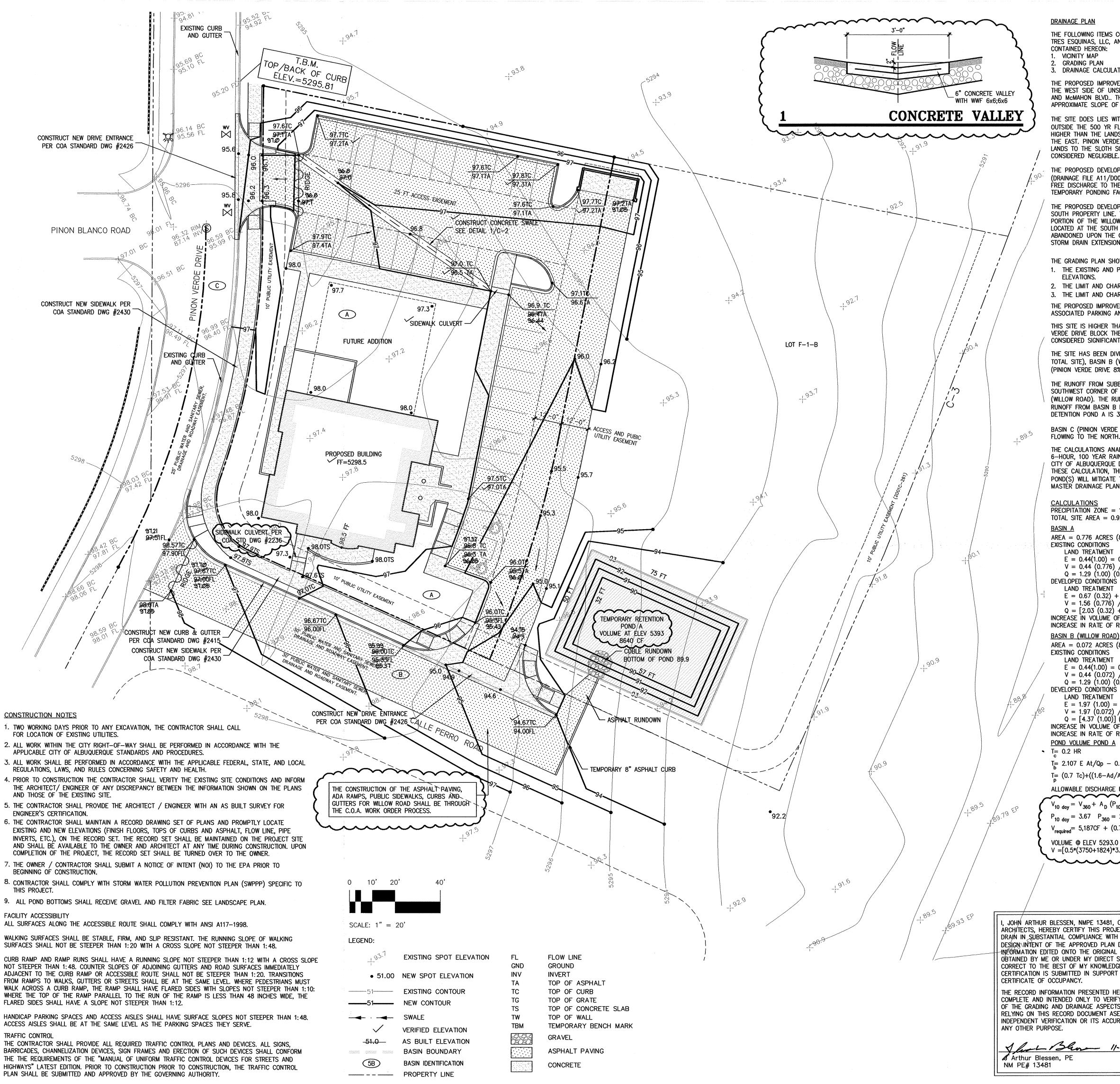
Sincerely, Orleno V. Portello

Arlene V. Portillo

Plan Checker, Planning Dept. - Hydrology

Development and Building Services

C: CO Clerk File



DRAINAGE PLAN

- THE FOLLOWING ITEMS CONCERNING LOT F-1-A LANDS OF ZOLIN/KUNATH. TRES ESQUINAS, LLC, AND CURBS, INC. GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:
- 2. GRADING PLAN
- 3. DRAINAGE CALCULATIONS

THE PROPOSED IMPROVEMENTS AS SHOWN BY THE VICINITY MAP, ARE LOCATED ON THE WEST SIDE OF UNSER BLVD. NORTH OF THE INTERSECTION OF UNSER BLVD. AND McMAHON BLVD.. THE SITE IS UNDEVELOPED AND SLOPES TO THE EAST AT AN APPROXIMATE SLOPE OF 3.0%.

THE SITE DOES LIES WITHIN FLOOD HAZARD ZONE X DESIGNATED ARE TO BE OUTSIDE THE 500 YR FLOOD PLAIN (PER FIRM PANEL 35001C0104 D). THE SITE IS HIGHER THAN THE LANDS TO THE NORTH, AND THE UNSER BLVD. RIGHT OF WAY TO THE EAST. PINON VERDE DRIVE TO WEST BLOCK FLOWS FROM THAT DIRECTIONS. THE LANDS TO THE SLOTH SOUTH SLOPE TO THE EAST. THEREFORE OFFSITE FLOWS ARE CONSIDERED NEGLIGIBLE.

THE PROPOSED DEVELOPMENT LIE WITHIN THE RIDGEVIEW VILLAGE SUBDIVISION (DRAINAGE FILE A11/D007). THE MASTER DRAINAGE PLAN FOR THIS DEVELOPMENT FREE DISCHARGE TO THE FUTURE STORM DRAIN IN UNSER BLVD. THEREFORE TEMPORARY PONDING FACILITIES WILL BE REQUIRED.

THE PROPOSED DEVELOPMENT WILL DISCHARGE TO THE NEW STREET ALONG THE SOUTH PROPERTY LINE. THE DISCHARGE FROM THE SITE AND THE PROPOSED PORTION OF THE WILLOW ROAD WITH DRAIN TO A TEMPORARY DETENTION POND LOCATED AT THE SOUTH EAST CORNER OF LOT F-1-B. THE TEMPORARY POND WILL ABANDONED UPON THE COMPLETION OF WILLOW ROAD AND THE NORTH UNSER BLVD. STORM DRAIN EXTENSION.

THE GRADING PLAN SHOWS:

- 1. THE EXISTING AND PROPOSED GRADES, INDICATED BY SPOT
- 2. THE LIMIT AND CHARACTER OF EXISTING IMPROVEMENTS, AND
- 3. THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS. THE PROPOSED IMPROVEMENTS CONSIST OF A VETERINARIAN CLINIC WITH ASSOCIATED PARKING AND LANDSCAPING.

THIS SITE IS HIGHER THAN THE LANDS TO THE NORTH, SOUTH AND EAST. PINION VERDE DRIVE BLOCK THE FLOWS FROM THE WEST, THERE OFFSITE FLOWS ARE NOT CONSIDERED SIGNIFICANT.

THE SITE HAS BEEN DIVIDED INTO THREE SUBBASINS: BASIN A (84% OF THE TOTAL SITE), BASIN B (WILLOW ROAD 8% OF THE TOTAL SITE) AND BASIN C (PINION VERDE DRIVE 8% OF THE TOTAL SITE)

THE RUNOFF FROM SUBBASIN A FLOW TO THE DETENTION POND A LOCATED AT SOUTHWEST CORNER OF LOT F-1-B ALONG WITH THE RUNOFF FROM BASIN B (WILLOW ROAD). THE RUNOFF FROM BASIN A IS 2.8 CFS (3.6 CFS/ACRE). THE RUNOFF FROM BASIN B IS 0.3 CFS (4.2 CFS/ACRE). THE COMBINED RUNOFF TO DETENTION POND A IS 3.1 CSF.

BASIN C (PINION VERDE DRIVE) WAS PREVIOUSLY DEVELOPED WITH RUNOFF FLOWING TO THE NORTH. NO CHANGES ARE BEING PROPOSED TO THIS BASIN.

THE CALCULATIONS ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 6-HOUR, 100 YEAR RAINFALL EVENT. THE ANALYSIS IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL VOLUME II. AS SHOWN BY THESE CALCULATION, THE RATE AND VOLUME OF RUNOFF WILL INCREASE BUT THE POND(S) WILL MITIGATE THE INCREASE. THIS PLAN IS IN CONFORMANCE WITH THE MASTÈR DRAINAGE PLAN.

PRECIPITATION ZONE = 1

TOTAL SITE AREA = 0.92 ACRES

AREA = 0.776 ACRES (84%)EXISTING CONDITIONS

- LAND TREATMENT E = 0.44(1.00) = 0.44 INCHES
- V = 0.44 (0.776) / 12 = 0.028 ACRE FEETQ = 1.29 (1.00) (0.776) = 1.00 CFS
- LAND TREATMENT E = 0.67 (0.32) + 1.97 (0.68) = 1.56 INCHESV = 1.56 (0.776) / 12 = 0.101 ACRE FEET
- Q = [2.03(0.32) + 4.37(0.68)](0.776) = 2.81 CFSINCREASE IN VOLUME OF RUNOFF = 0.072 ACRE FT INCREASE IN RATE OF RUNOFF = 1.81 CFS

BASIN B (WILLOW ROAD) AREA = 0.072 ACRES (8%)

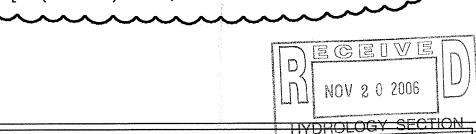
- LAND TREATMENT E = 0.44(1.00) = 0.44 INCHES V = 0.44 (0.072) / 12 = 0.003 ACRE FEET
- Q = 1.29 (1.00) (0.776) = 1.00 CFSDEVELOPED CONDITIONS
- LAND TREATMENT E = 1.97 (1.00) = 1.97 INCHESV = 1.97 (0.072) / 12 = 0.012 ACRE FEET
- Q = [4.37 (1.00)] (0.072) = 0.31 CFSINCREASE IN VOLUME OF RUNOFF = 0.009 ACRE FT INCREASE IN RATE OF RUNOFF = 0.22 CFS
- POND VOLUME POND A T= 0.2 HR 0.25 Ad/At = 0.25(0.71) = 0.178 HR
- T = 2.107 E At/Qp 0.25 Ad/At = 0.730 HR

T = (0.7 Tc) + ((1.6 - Ad/At))/12) = 0.214 HRALLOWABLE DISCHARGE RATE 0.0 CFS

 $V_{10 \text{ day}} = V_{360} + A_D (P_{10 \text{ day}} - P_{360})/12$

 $P_{10 \text{ day}} = 3.67 \quad P_{360} = 2.20$ $V_{required} = 5,187CF + (0.71)(.847)(43560)(3.67-2.20)/12 = 8,396 CF$

VOLUME @ ELEV 5293.0 (BOTTOM OF POND 5289.1) V = [0.5*(3750+1824)*3.1 = 8,640 CF]



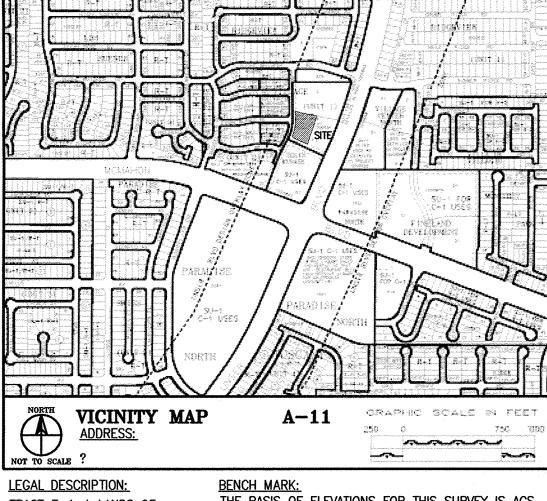
ARTHUR OF

MEX

I. JOHN ARTHUR BLESSEN, NMPE 13481, OF THE FIRM CLAUDIO VIGII ARCHITECTS, HEREBY CERTIFY THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGNAINTENT OF THE APPROVED PLAN DATED 10/26/05. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENTS HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ASE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OR ITS ACCURACY BEFORE USING IT FOR





TRACT F-1-A LANDS OF ZOLIN/KUNATH, TRES ESQUINAS, LLC, AND CURB, INC.

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS ACS BENCHMARK 1-\$11 PUBLISHED ELEVATION 5279.75 LOCATED ON THE EAST SIDE OF UNSER BLVD. N.W., 24FT. NORTH OF THE BERNALILLO/SANDOVAL COUNTY



GRADING AND DRAINAGE PLAN BLDG. PERMIT APPROVAL ACTION

OCTOBER 26, 2005

SCALE: 1" = 20'-0"

C-2

ROJECT NUMBER

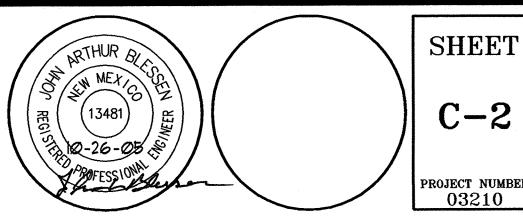
03210



CLAUDIO VIGIL ARCHITECTS

NORTH UNSER VET CLINIC LINDA CONTOS AND JOHN HEIDRICH

TRACTS F-1 & F-2 ALBUQUERQUE, NEW MEXICO



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