

CITY OF ALBUQUERQUE



October 9, 2009

Scott M McGee, P.E.
Isaacson & Arfman, PA
128 Monroe NE
Albuquerque, NM 87108

Re: Ventana Ranch Self Storage-Ph. III, 6500 Paradise Blvd NW
Approval of Permanent Certificate of Occupancy,
Engineer's Stamp Date: 10-6-08 (B10/D006)
Engineer's Certification Date: 10-8-09

Dear Mr. McGee,

PO Box 1293

Based upon the information provided in your submittal received 10/8/09, 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 924-3695.

NM 87103

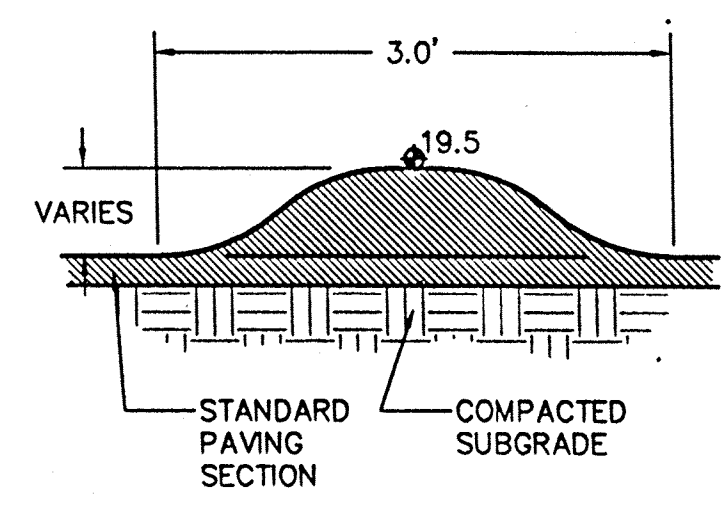
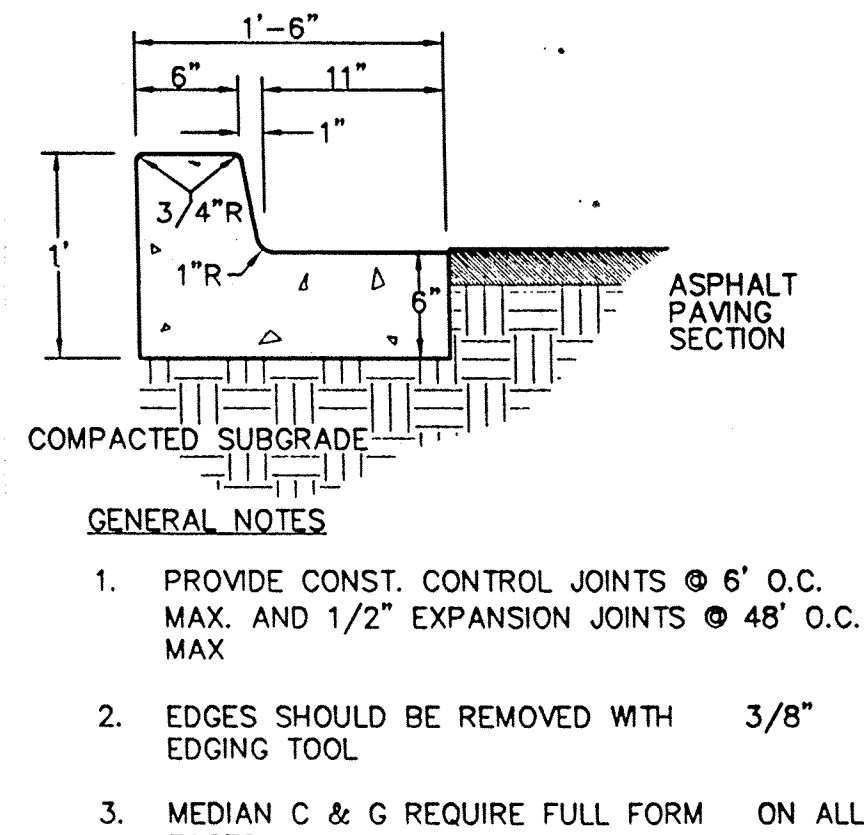
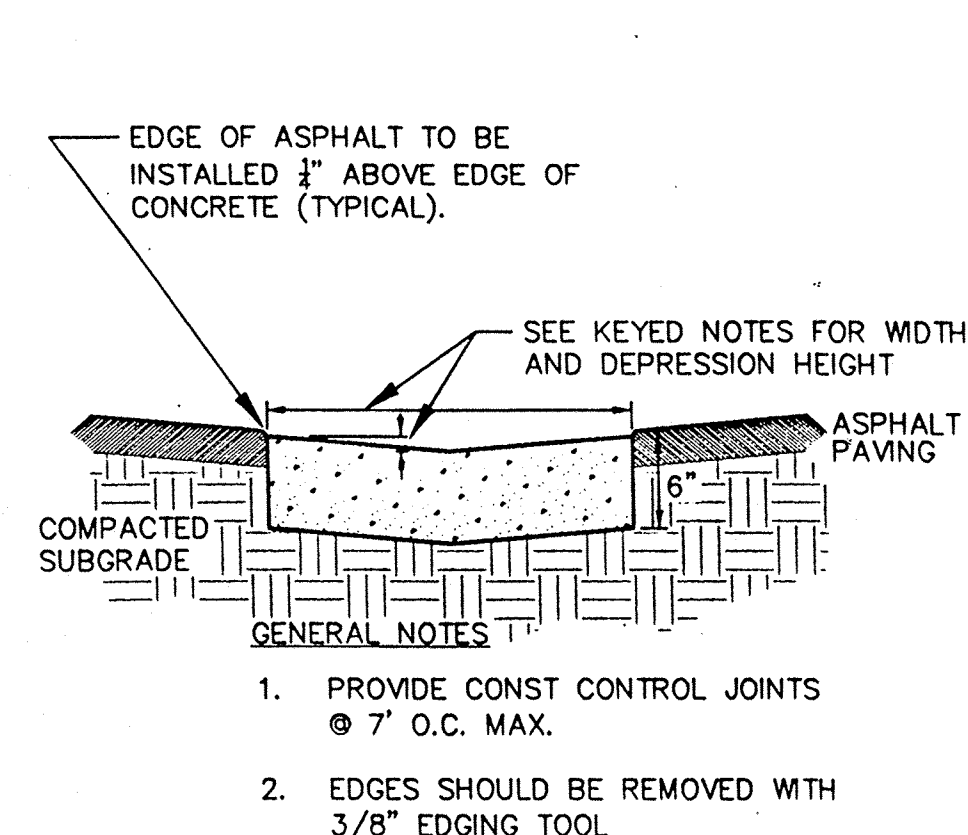
Sincerely,

A handwritten signature in cursive script, reading "Curtis A. Cherne".

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

www.cabq.gov

C: CO Clerk
file



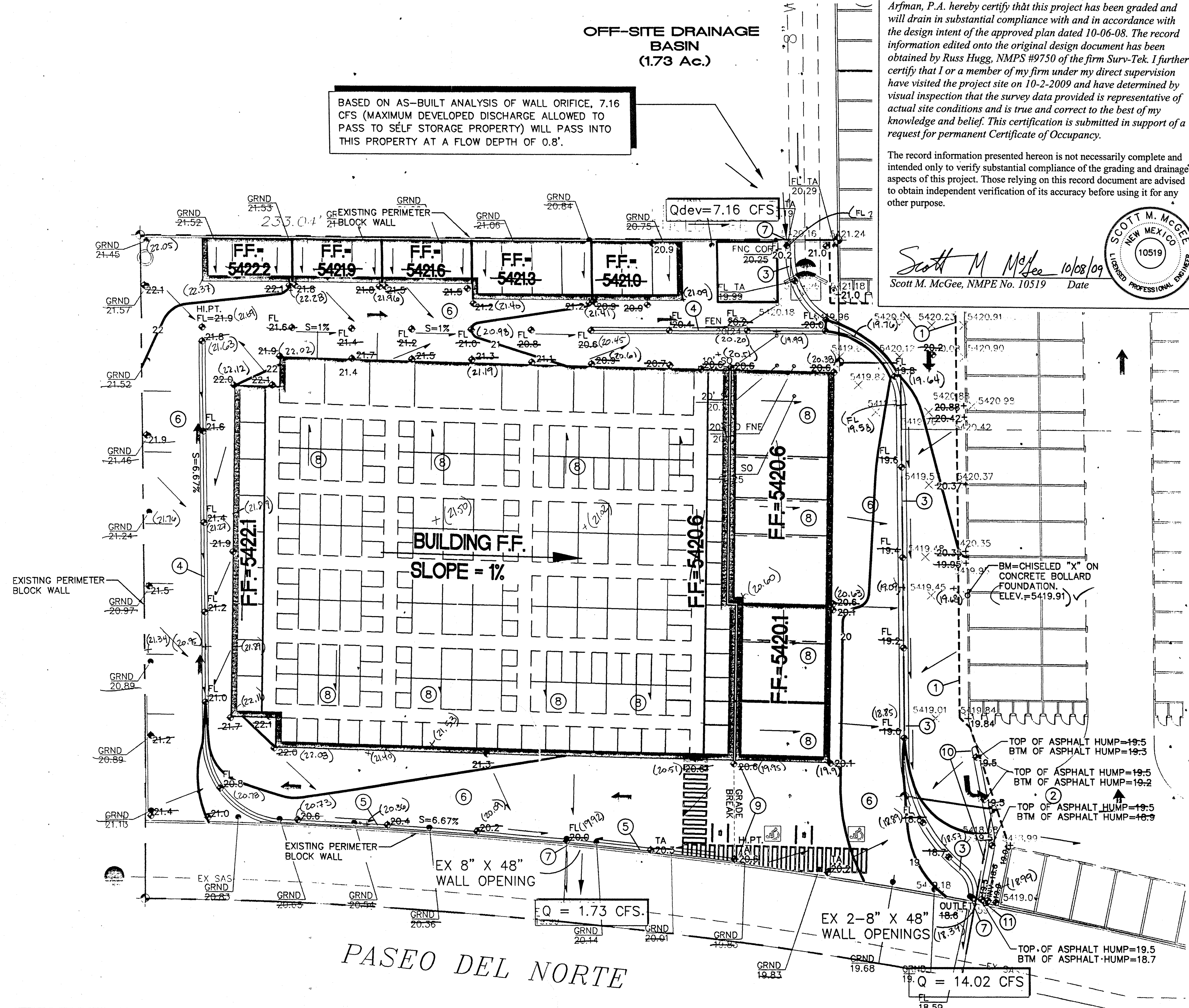
1 CONCRETE ALLEY GUTTER N.T.S. 2 CURB AND GUTTER N.T.S. 3 ASPHALT WATERBLOCK 'HUMP'

I, Scott M. McGee, NMPE No. 10519 of the firm Isaacson & Arfman, P.A. hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 10-06-08. 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 are advised to obtain independent verification of its accuracy before using it for any other purpose.

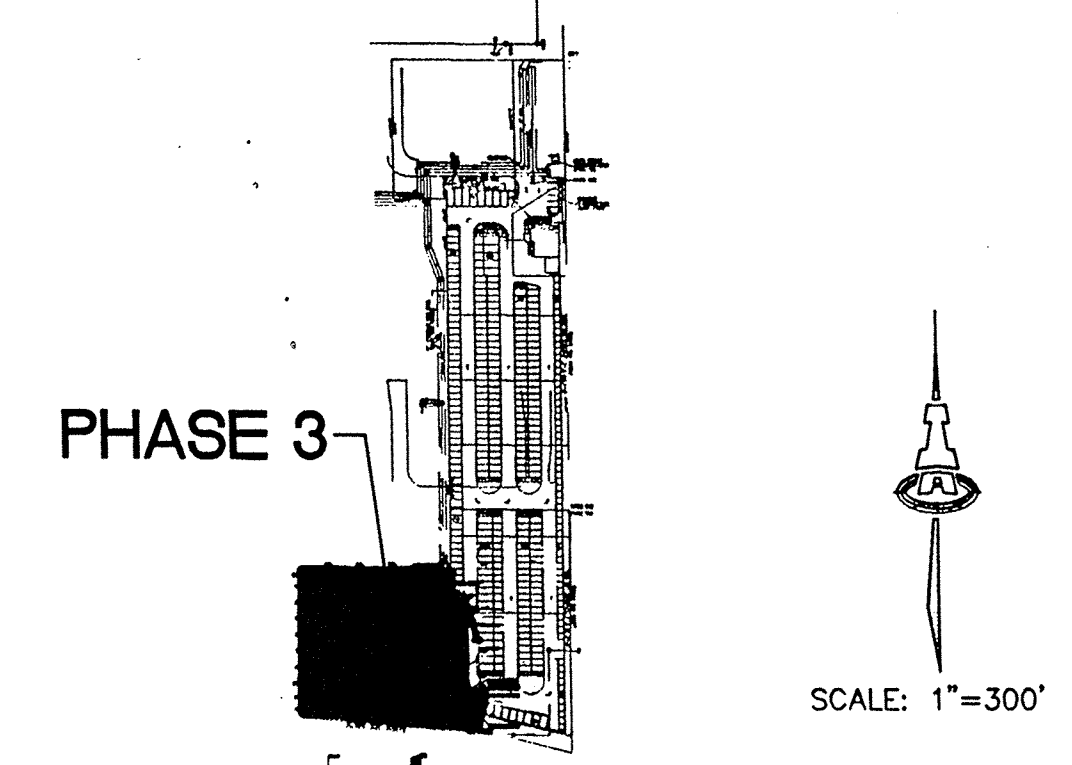
Scott M. McGee 10/08/09
Scott M. McGee, NMPE No. 10519 Date

BASED ON AS-BUILT ANALYSIS OF WALL ORIFICE, 7.16 CFS (MAXIMUM DEVELOPED DISCHARGE ALLOWED TO PASS TO SELF STORAGE PROPERTY) WILL PASS INTO THIS PROPERTY AT A FLOW DEPTH OF 0.8'.

OFF-SITE DRAINAGE BASIN (1.73 Ac.)



SITE KEY



GENERAL NOTES

- FINAL GRADES SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
 - EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. ALL UTILITIES SHOULD BE FIELD VERIFIED AND LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES.
 - ADJUST RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES, TYPICAL.
 - ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS AND POSITIVE SLOPE TOWARD EXISTING AND/OR PROPOSED DRAINAGE PATHS. WHERE NEW GRADES ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH AND LEVEL.
- KEYED NOTES
- SAWCUT AND REMOVE ALL ASPHALT WEST OF CUT LINE.
 - SAWCUT AND REMOVE ADDITIONAL ASPHALT AS NECESSARY TO PROVIDE SMOOTH TRANSITION AND ENSURE POSITIVE DRAINAGE TO FLOWLINE ELEVATIONS SHOWN.
 - CONSTRUCT 3' WIDE X 2' DEPRESSED CONCRETE ALLEY GUTTER (SEE DETAIL THIS SHEET) TO DEFINE MAIN FLOWLINE FROM NORTH WALL OPENING TO SOUTH WALL OPENING. MAINTAIN POSITIVE SLOPE (MIN. 0.5%).
 - CONSTRUCT 2' WIDE X 1' DEPRESSED CONCRETE ALLEY GUTTER (SEE DETAIL THIS SHEET) ALONG FLOWLINE IN AREAS WHERE SLOPE < 1% TO REDUCE POTENTIAL FOR BIRD BATHS / MAINTENANCE.
 - CONSTRUCT CURB AND GUTTER (SEE DETAIL THIS SHEET) ALONG SOUTH FACE OF WALL TO DIRECT DISCHARGE TO EXISTING OPENING IN WALL.
 - CONSTRUCT NEW ASPHALT PAVING AT ELEVATIONS SHOWN.
 - TOP OF NEW ASPHALT TO MATCH FL ELEVATION OF EXISTING OPENING IN WALL.
 - ALL ROOF DISCHARGE TO BE RELEASED DIRECTLY TO PAVEMENT VIA DOWNSPOUTS. SEE ARCHITECTURAL.
 - CONSTRUCT ASPHALT AT GRADE BREAK ELEVATIONS SHOWN (PROVIDE SMOOTH TRANSITION) THIS AREA TO ENSURE FLOW IS DIRECTED TO EXISTING OUTLET.
 - CONSTRUCT ASPHALT WATERBLOCK 'HUMP' (SEE DETAIL THIS SHEET) AT ELEVATIONS SHOWN. NOTE: TOP OF PROPOSED ASPHALT HUMP MUST BE CONSTRUCTED AT OR ABOVE 19.5 (6" ABOVE ADJACENT UNIT F.F.) TO ENSURE FLOW IS CHanneled TO EXISTING WALL OPENINGS.
 - INSTALL TWO 6" DIA. PIPES THROUGH EXISTING BLOCK WALL AT FLOWLINE ELEVATION SHOWN TO PASS MINOR FLOW.
- OWNER TO MAINTAIN CLEAR ALL DRAINAGE OPENINGS.

CALCULATIONS

CALCULATIONS: Ventana Ranch Square Self Storage

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

ON-SITE	
AREA OF SITE:	58290 SF = 1.3 Ac.

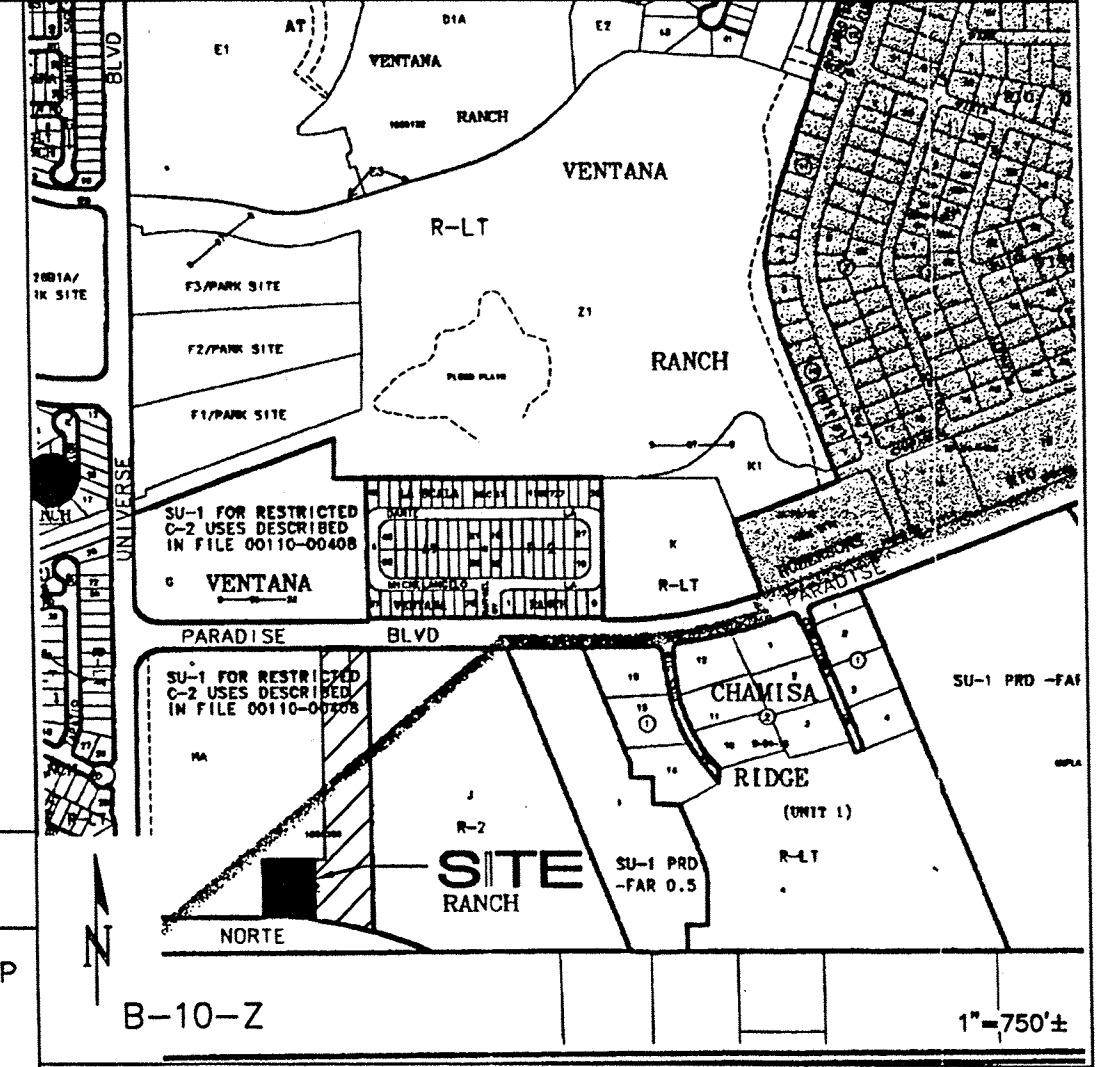
HISTORIC FLOWS:	
On-Site Historic Land Condition	DEVELOPED FLOWS:
Area A = 0 SF	Area A = 0 SF
Area B = 0 SF	Area B = 0 SF
Area C = 0 SF	Area C = 0 SF
Area D = 58290 SF	Area D = 58290 SF
Total Area = 58290 SF	Total Area = 58290 SF

ON-SITE WEIGHTED EXCESS PRECIPITATION (100-Year, 6-Hour Storm)	
Weighted E =	$E_A A_A + E_B A_B + E_C A_C + E_D A_D$
Historic E =	1.97 in.
Developed E =	1.97 in.

ON-SITE VOLUME OF RUNOFF: V360 = E * A / 12	
Historic V360 =	9569 CF
Developed V360 =	9569 CF

ON-SITE PEAK DISCHARGE RATE: Qp = QpA + QpB + QpC + QpD / 43.560	
For Precipitation Zone 1	
QpA = 1.29	QpC = 2.87
QpB = 2.03	QpD = 4.37
Historic Qp =	5.8 CFS
Developed Qp =	5.8 CFS

VICINITY MAP



PROJECT DATA

LEGAL DESCRIPTION: TRACT H-12, VENTANA RANCH

SITE AREA: TOTAL AREA 5.1913 Ac. (225,984 SF)
PROJECT AREA 1.3382 Ac. (58,290 SF)

FLOOD ZONE: ALL PORTIONS OF THIS SITE ARE OUTSIDE OF THE 100-YR. FLOODPLAIN AS DESIGNATED ON PANEL NO. 103 OF 825 OF THE FEMA FLOOD INSURANCE RATE MAP.

ENGINEER: FRED C. ARFMAN
ISAACSON & ARFMAN, P.A.
128 MONROE ST NE, ABO. NM 87108
PHONE: (505) 268-8828

SURVEYOR: SOUDER, MILLER & ASSOCIATES
730 SAN MATEO BLVD. SE
ALBUQUERQUE, NM 87108

BENCHMARK: ORIGINALLY ACS "1-B10" (DESTROYED)

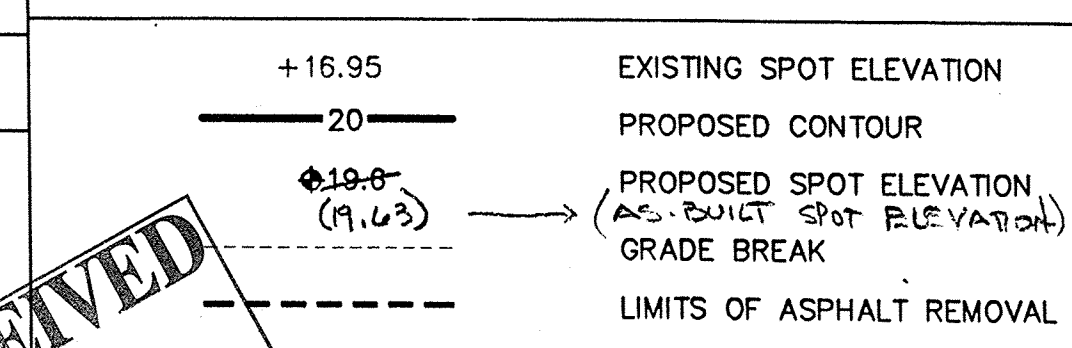
TEMPORARY BENCHMARK: SEE PLAN

EXISTING CONDITIONS: THE SUBJECT SITE IS A FULLY DEVELOPED STORAGE FACILITY. THE PREVIOUSLY APPROVED MULTI-PHASE DRAINAGE PLAN INCLUDED CALCULATIONS FOR 90% IMPERMEABLE. ALL STORM WATERS PASS THROUGH EXISTING OPENINGS IN THE SOUTH WALL TO AN EXISTING ASPHALT DRAINAGE SWALE SOUTH OF THE PROPERTY TO FOLLOW THE HISTORIC FLOWPATH.

OFFSITE: THE DRAINAGE MASTERPLAN CALLS FOR THE SELF STORAGE SITE TO ACCEPT 7.16 CFS FROM A 1.73 ACRE PORTION OF TRACT H TO THE NORTHWEST. THIS FLOW WILL CONTINUE TO PASS THROUGH THE PROPERTY.

DRAINAGE PLAN CONCEPT: THE PORTION TO BE FURTHER DEVELOPED WILL INVOLVE CONSTRUCTION OF ADDITIONAL STORAGE BUILDINGS IN PLACE OF THE EXISTING VEHICLE STORAGE AREA. THE RUNOFF FROM THE SITE WILL CONTINUE TO DRAIN INTO AN EXISTING CHANNEL THROUGH OPENINGS IN THE EXISTING WALL ALONG THE SOUTH BOUNDARY. DEVELOPED CONDITIONS WILL NOT INCREASE THE RUNOFF. A FLOWRATE OF 15.75 CFS WILL EXIT THE SITE INCLUDING RUNOFF RECEIVED FROM OFFSITE.

LEGEND



RECEIVED

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 Fax. 505-268-2632
1681 CG-101.dwg Oct 03, 2008

VENTANA RANCH SELF STORAGE PHASE 3

TECHNICAL CONTRACTORS & INSTALLATIONS

GRADING AND DRAINAGE PLAN

Date:	No.	Revised:	Date:	Job No.
09-10-08				1681
Drawn By:				CG-101
Chk By:				SI OF