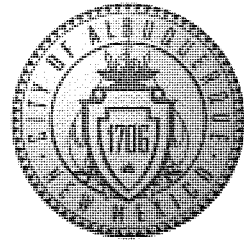


CITY OF ALBUQUERQUE



July 3, 2013

Larry Read, P.E.
Larry Read and Associates, Inc.
2430 Midtown Suite C
Albuquerque, NM 87107
lread@readengineering.com

**Re: HME Specialists, Conceptual Grading Plan
Engineer's Stamp date -no stamp- (A12/D008C)**

Dear Mr. Read,

Based upon the information provided in your submittal received 6-21-13, the above referenced plan is approved for Site Development for Building Permit action by the DRB.

If you have any questions, you can contact me at 924-3986.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Sincerely,

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

C: File

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: HME Specialists
DRB #: _____

EPC#: _____

ZONE MAP/DRG. FILE #: A-12/10008c
WORK ORDER#: _____

LEGAL DESCRIPTION: Lot B-1-A-1
CITY ADDRESS: 10800 golf Course Rd. NW

ENGINEERING FIRM: LARRY READ & ASSOCIATES, INC
ADDRESS: 2430 Midtown Suite C
CITY, STATE: ALBUQUERQUE, NEW MEXICO

CONTACT: LARRY READ
PHONE: 237-8421
ZIP CODE: 87107

OWNER: Calabacillas Group
ADDRESS: 3646 vista Grande Dr. NW
CITY, STATE: Albuquerque, NM

CONTACT: _____
PHONE: _____
ZIP CODE: 87120

ARCHITECT: TATE FISHBURN
ADDRESS: Box 2941
CITY, STATE: CORRALES, NEW MEXICO

CONTACT: TATE FISHBURN
PHONE: 899-9338
ZIP CODE: 87048

SURVEYOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CONTRACTOR: _____
ADDRESS: _____
CITY, STATE: _____

CONTACT: _____
PHONE: _____
ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

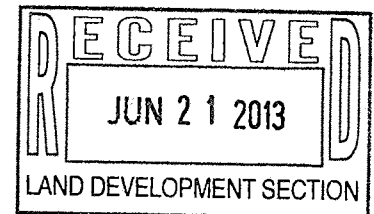
- DRAINAGE REPORT
- DRAINAGE PLAN 1st SUBMITTAL, **REQUIRES TCL or equal**
- DRAINAGE PLAN RESUBMITTAL
- CONCEPTUAL GRADING & DRAINAGE PLAN
- GRADING PLAN
- EROSION CONTROL PLAN
- ENGINEER'S CERTIFICATION (HYDROLOGY)
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- ENGINEERS CERTIFICATION (TCL)
- ENGINEERS 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: June 21, 2013

BY: Larry D. Read, PE

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.

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

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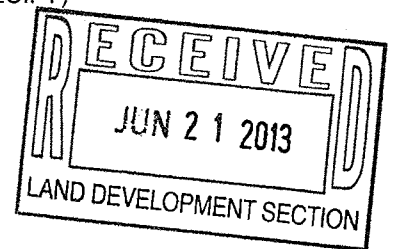
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- GRADING PERMIT APPROVAL
- PAVING PERMIT APPROVAL
- WORK ORDER APPROVAL
- OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

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- NO
- COPY PROVIDED

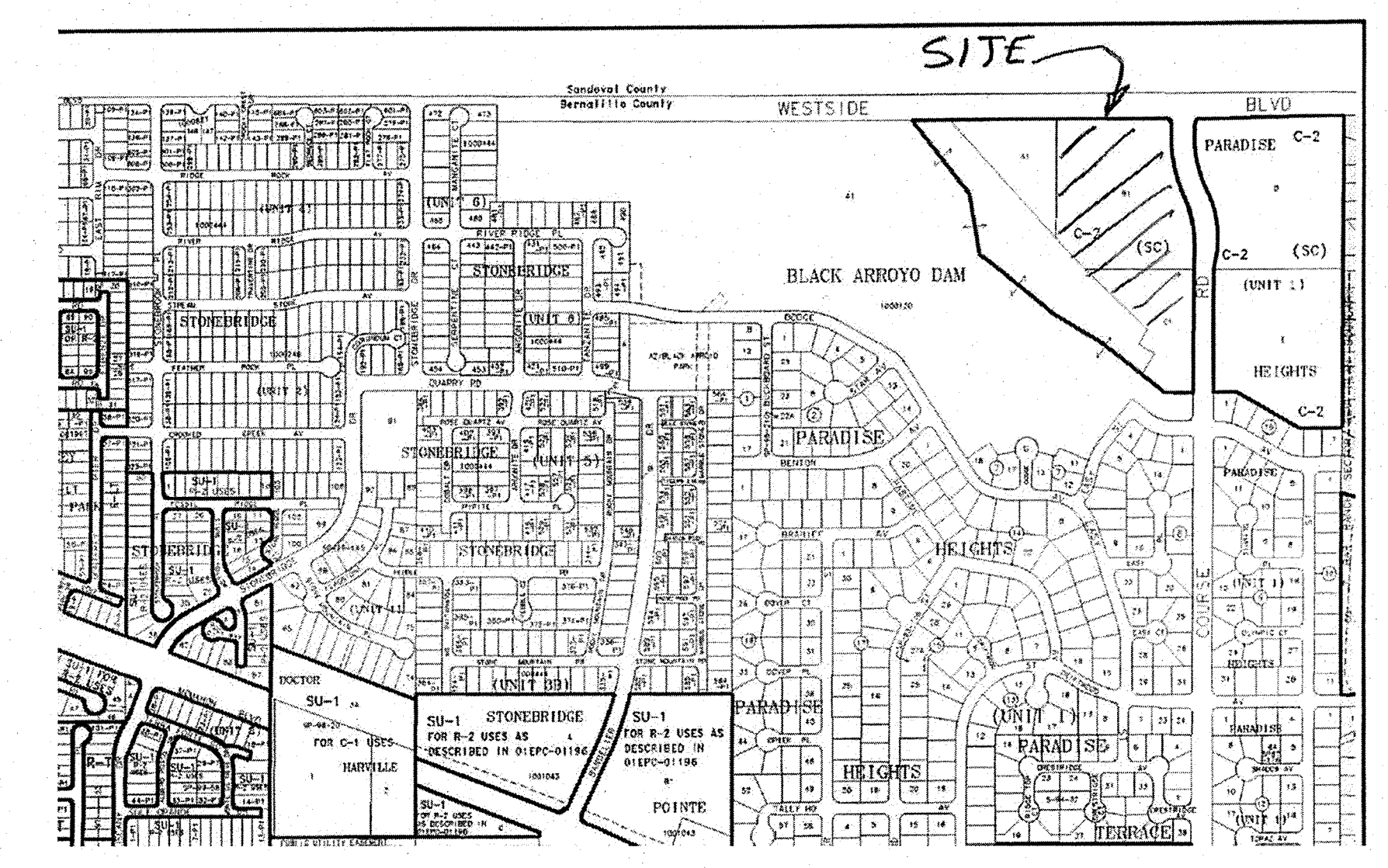


DATE SUBMITTED: June 21, 2013

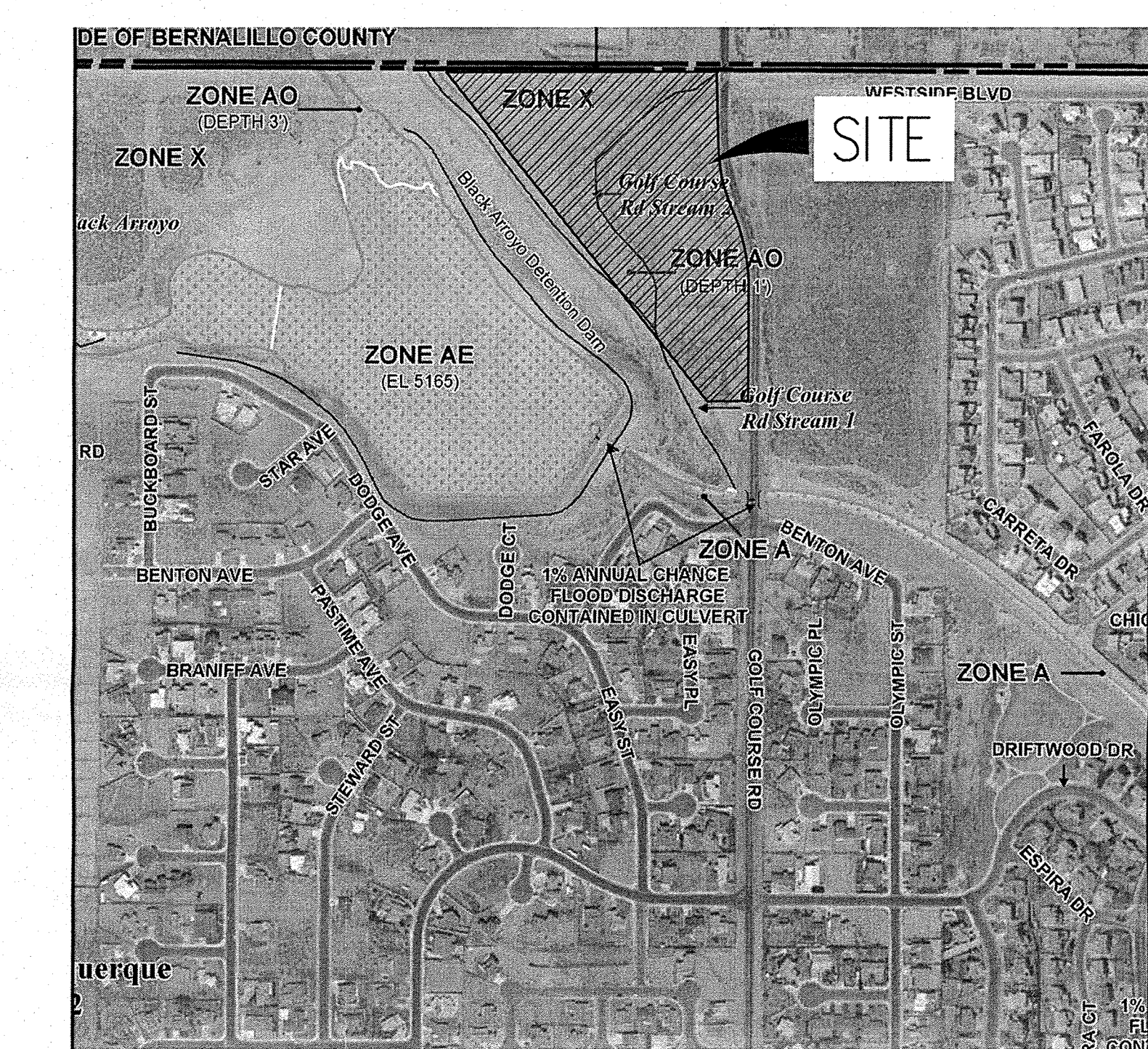
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VICINITY MAP ZONE ATLAS PAGE A-12



FIRM MAP PANEL 35001 C0108G
EFFECTIVE DATE SEPT 26, 2008

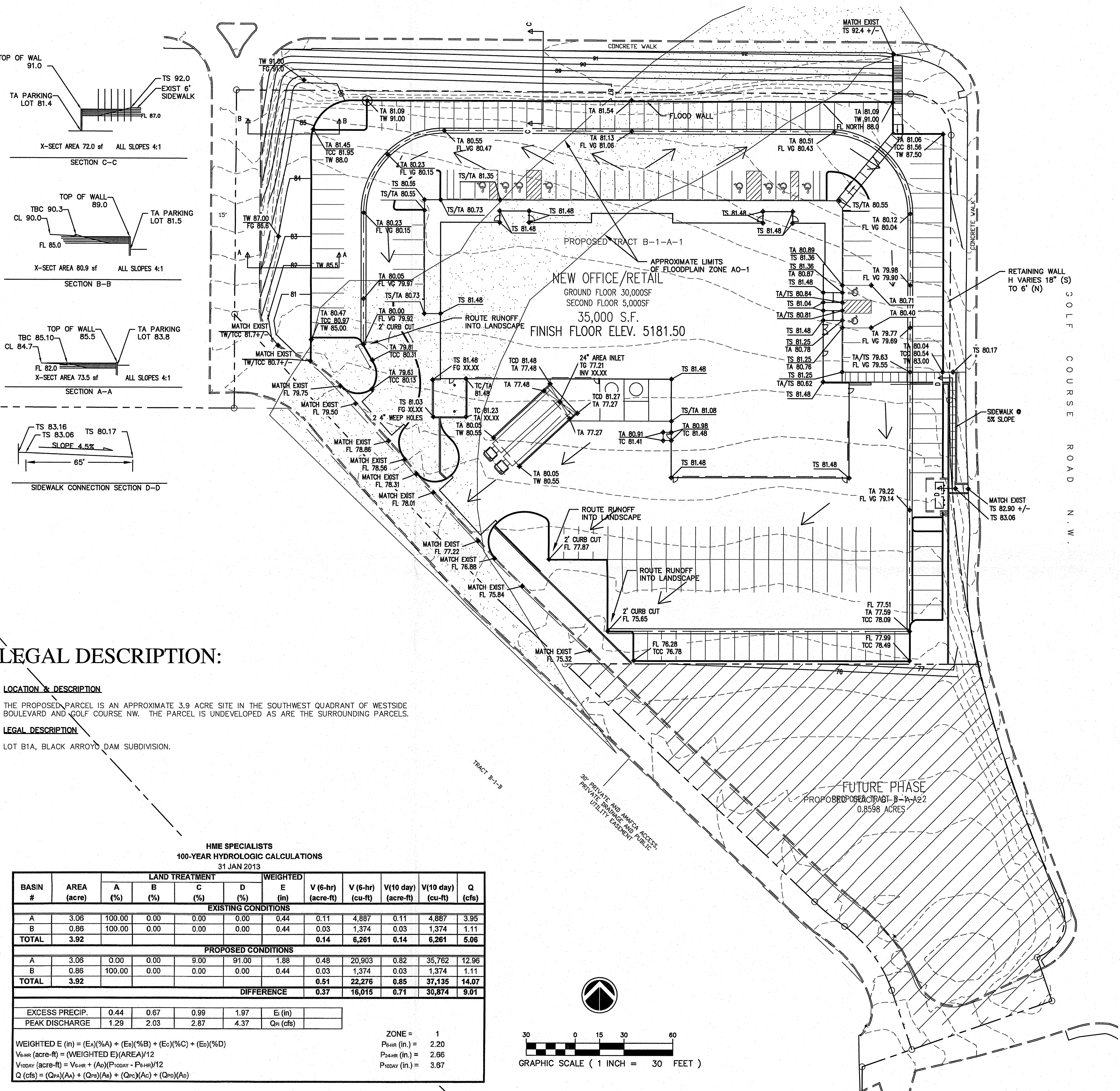
DRAINAGE REPORT

HYDROLOGY
THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION
THE 100-YR, 6-HR STORM EVENT WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THE SITE LIES WITHIN THE ZONE 1 PRECIPITATION AREA FOR THE CITY OF ALBUQUERQUE, AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. THEREFORE, THE RUNOFF TAKES TWO PATHS. THE RUNOFF FROM THE WESTERN PORTION OF THE SITE FLOWS WEST THROUGH THE NORTHERN DRIVEPAD TO THE NEW PRIVATE ROAD THAT CONVEYS THE RUNOFF SOUTH TO THE SOUTHERN END OF THE BLACK ARROYO DAM. RUNOFF FROM THE EASTERN PORTION OF THE SITE SHEET FLOWS SOUTH, ON THE PROPOSED PARKING LOT PAVEMENT, WHERE IT ULTIMATELY DISCHARGES FROM THE SITE INTO THE NEW PRIVATE ROAD DISCUSSED ABOVE. IT IS THE INTENT OF THIS GRADING PLAN TO DEPRESS LANDSCAPE AREAS ALONG THE WEST SIDE OF THE SITE AND ROUTE THE RUNOFF FROM THE PAVED AREAS THROUGH THOSE LANDSCAPE AREAS AS A WATER HARVESTING MEASURE.

EXISTING DRAINAGE
THE SITE AS IT CURRENTLY EXISTS HAS A RELATIVELY UNIFORM NORTH TO SOUTH SLOPE OF APPROXIMATELY 3.3%. RUNOFF MODE IS SHALLOW SHEET FLOW. PER THE EXISTING FLOOD RATE INSURANCE MAP, THE IS AN AO-1 FLOOD PLAIN ON SITE FROM THE NORTHEAST CORNER TOWARD THE SOUTHWEST THEN SOUTH PARALLELING THE WEST PROPERTY LINE OF THIS PARCEL. THIS DISCUSSION ACKNOWLEDGES THE FLOODPLAIN IS NOTED ON THE MAP BUT ALSO REALIZES A LETTER OF MAP REVISION (LOMR) HAS BEEN SUBMITTED TO REVISE THE MAP BASED ON STORMWATER CONTROL FACILITIES RECENTLY CONSTRUCTED UPSTREAM OF THIS PARCEL. STORMWATER GENERATED FROM THIS SITE DISCHARGES ON THE SOUTH END OF THE SITE TO THE LOWER END OF THE BLACK ARROYO DAM.

DEVELOPED CONDITION
THE PROPOSED GRADING FOR THIS PROJECT GENERALLY CONTINUES THE PATTERN OF THE EXISTING STORMWATER RUNOFF EXCEPT THAT THE RUNOFF FROM THE NORTHERN PORTION OF THE SITE IS ROUTED AROUND THE BUILDING IN THE PAVED PARKING LOT AND THE RUNOFF FROM THE FLOODPLAIN IS ROUTED AROUND THE SITE VIA A FLOOD WALL ON THE NORTH AND WEST SIDES OF THE SITE TO DRY PROOF THE BUILDING PER FEMA TECHNICAL BULLETIN 93-3. THE FLOOD PROOFING REPLACES THE EXISTING FLOW AREA (71' WIDE X 1' DEEP PER ZONE AO-1) WITH EQUIVALENT FLOW AREA, ONCE SOUTH OF THE BUILDING, THE RUNOFF TAKES TWO PATHS. THE RUNOFF FROM THE WESTERN PORTION OF THE SITE FLOWS WEST THROUGH THE NORTHERN DRIVEPAD TO THE NEW PRIVATE ROAD THAT CONVEYS THE RUNOFF SOUTH TO THE SOUTHERN END OF THE BLACK ARROYO DAM. RUNOFF FROM THE EASTERN PORTION OF THE SITE SHEET FLOWS SOUTH, ON THE PROPOSED PARKING LOT PAVEMENT, WHERE IT ULTIMATELY DISCHARGES FROM THE SITE INTO THE NEW PRIVATE ROAD DISCUSSED ABOVE. IT IS THE INTENT OF THIS GRADING PLAN TO DEPRESS LANDSCAPE AREAS ALONG THE WEST SIDE OF THE SITE AND ROUTE THE RUNOFF FROM THE PAVED AREAS THROUGH THOSE LANDSCAPE AREAS AS A WATER HARVESTING MEASURE.



LEGAL DESCRIPTION:

LOCATION & DESCRIPTION
THE PROPOSED PARCEL IS AN APPROXIMATE 3.9 ACRE SITE IN THE SOUTHWEST QUADRANT OF WESTSIDE BOULEVARD AND GOLF COURSE NW. THE PARCEL IS UNDEVELOPED AS ARE THE SURROUNDING PARCELS.

LEGAL DESCRIPTION
LOT B1A, BLACK ARROYO DAM SUBDIVISION.

HME SPECIALISTS
100-YEAR HYDROLOGIC CALCULATIONS
31 JAN 2013

BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V (10 day) (acre-ft)	V (10 day) (cu-ft)	Q (cfs)
		A (%)	B (%)	C (%)	D (%)						
EXISTING CONDITIONS											
A	3.06	100.00	0.00	0.00	0.00	0.44	0.11	4,887	0.11	4,887	3.95
B	0.86	100.00	0.00	0.00	0.00	0.44	0.03	1,374	0.03	1,374	1.11
TOTAL	3.92						0.14	6,261	0.14	6,261	5.06
PROPOSED CONDITIONS											
A	3.06	0.00	0.00	9.00	91.00	1.88	0.48	20,903	0.82	35,762	12.96
B	0.86	100.00	0.00	0.00	0.00	0.44	0.03	1,374	0.03	1,374	1.11
TOTAL	3.92						0.51	22,276	0.85	37,135	14.07
DIFFERENCE							0.37	16,015	0.71	30,874	9.01
EXCESS PRECIP.		0.44	0.67	0.99	1.97	E (in)					
PEAK DISCHARGE		1.29	2.03	2.87	4.37	Q _{pk} (cfs)					
WEIGHTED E (in) = (E _A)(%A) + (E _B)(%B) + (E _C)(%C) + (E _D)(%D)											
V _{6-hr} (acre-ft) = (WEIGHTED E)(AREA)/12											
V _{10day} (acre-ft) = V _{6-hr} + (A ₀)(P _{10day} - P _{6-hr})/12											
Q (cfs) = (Q _{pk})(A ₀) + (Q _{pk})(A _B) + (Q _{pk})(A _C) + (Q _{pk})(A _D)											
ZONE = 1											
P _{6-hr} (in.) = 2.20											
P _{24-hr} (in.) = 2.66											
P _{10day} (in.) = 3.67											

