

# CITY OF ALBUQUERQUE



January 31, 2012

Genevieve L. Donart, P.E.  
Isaacson & Arfman, P.A.  
128 Monroe St. NE  
Albuquerque, NM 87108

**Re: Lot 2, McMahon Marketplace  
Conceptual Grading and Drainage Plan  
Engineer's Stamp Date (none), A11/D011A**

Dear Ms. Donart,

Based upon the information provided in your submittal received 1/12/2012, the above referenced report is approved for Site Plan for Subdivision. The following comments have to be addressed prior to an approval for Grading and Building Permits:

- This grading plan does not exactly follow the overall basin layout. Provide proposed basin layout based on the Lot 2 grading plan. Provide capacity calculations for the inlets which may be impacted by these changes.
- Include a City of Albuquerque BM on the plan (NAVD 88).
- Add Legends.
- Show roof flow directions.
- It appears that the spot elevation "7.50" by the ramps should be "8.50".
- How will the offsite runoff from the south drain through this site? Will there be a desilting pond?
- Provide additional top and bottom of wall elevations for the proposed retaining wall. Please call out the stem wall and size located on the south side of the building.
- If a restaurant is being proposed the trash enclosure area(s) must drain to the sewer system, and detail grades have to be added to the plan.
- Please make sure that the existing storm drain system is draining properly.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Shahab Biazar, P.E.  
Senior Engineer, Planning Dept.  
Development and Building Services

C: File

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

PROJECT TITLE: LOT 2, MCMAHON MARKETPLACE ZONE MAP/DRG.FILE# A-11 / DCUA  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: Lot 2, McMahon Marketplace  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: ISAACSON AND ARFMAN  
ADDRESS: 128 MONROE N.E.  
CITY, STATE: ALBUQUERQUE, NM

CONTACT: Genny Donart  
PHONE: 268-8828  
ZIP CODE: 87108

OWNER: Peterson INV-McMahon, LLC, c/o Peterson Prop.  
ADDRESS: 2325 SAN PEDRO NE SUITE 2-A  
CITY, STATE: Albuquerque, NM

CONTACT: Doug Peterson  
PHONE: 884-3578  
ZIP CODE: 87110

ARCHITECT: Martin Grummer  
ADDRESS: 331 Wellesley Pl NE  
CITY, STATE: Albuquerque, NM

CONTACT: Martin Grummer  
PHONE: \_\_\_\_\_  
ZIP CODE: 87106

SURVEYOR: Surv-Tek, Inc  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

CONTACT: Russ Hugg  
PHONE: 897-  
ZIP CODE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_

**TYPE OF SUBMITTAL:**

- ☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1<sup>st</sup> 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:**

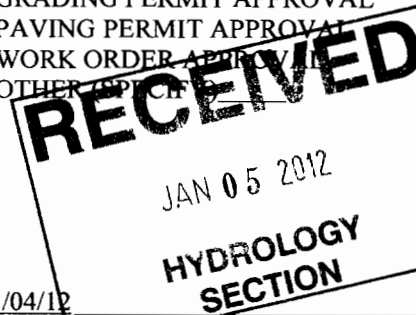
- ☐ SIA/FINANCIAL GUARANTEE RELEASE  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D APPROVAL  
☒ S. DEV. FOR BLDG. PERMIT APPROVAL  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☐ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY (PERM)  
☐ CERTIFICATE 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: Genny Donart  
Isaacson & Arfman, P.A.

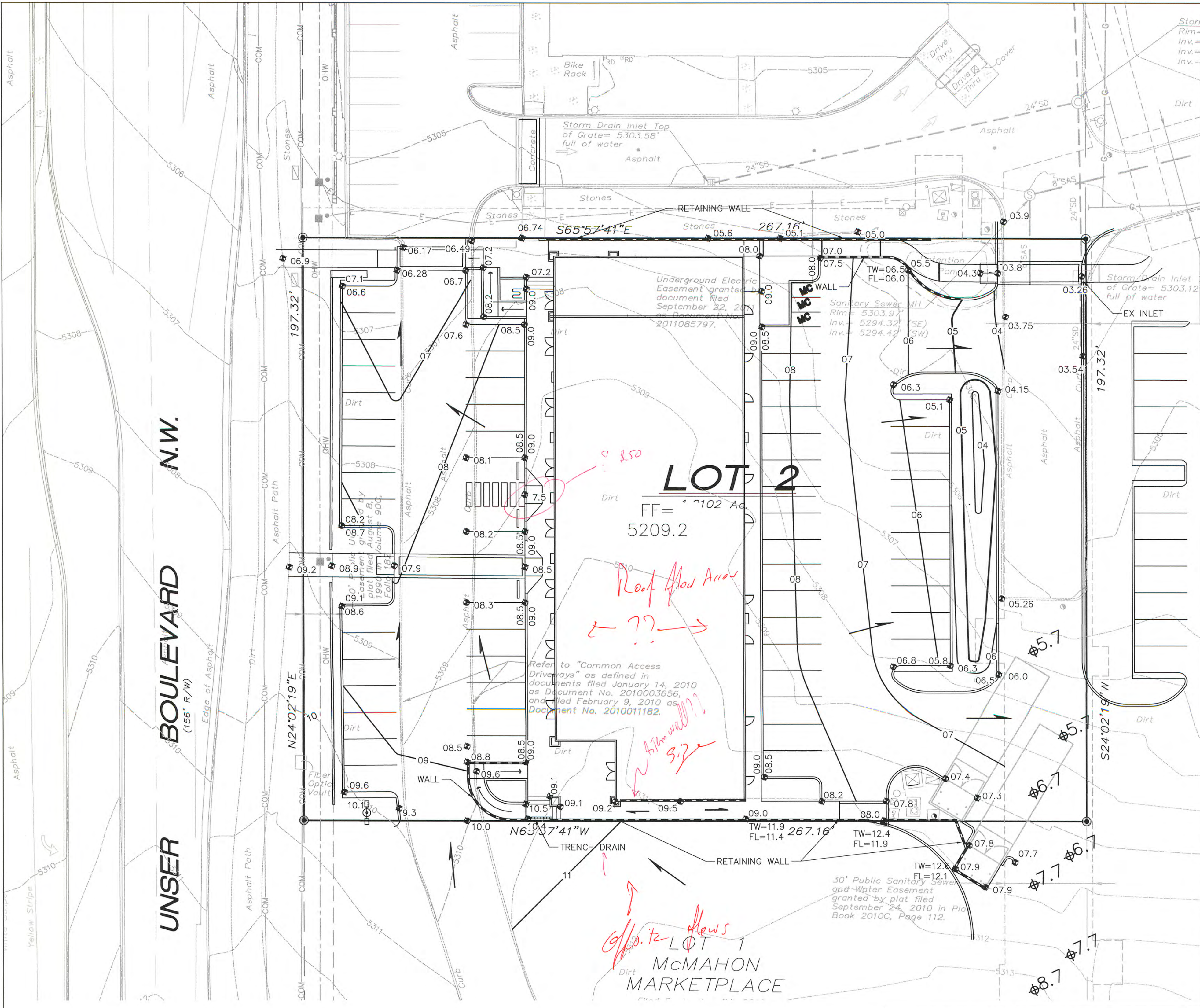
DATE: 01/04/12



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:

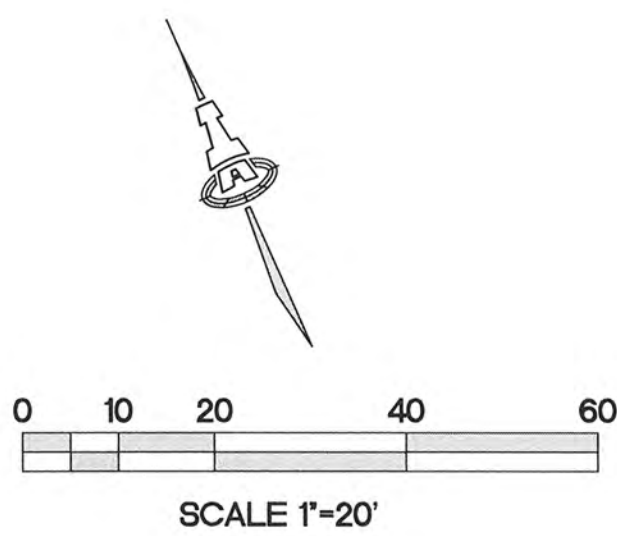
1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.





### KEYED NOTES

- .....
- .....
- .....



### GENERAL NOTES

- COORDINATE WORK WITH SITE PLAN, UTILITY PLAN, AND LANDSCAPE PLAN.
- ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- ALL SUBGRADE, OVEREXCAVATION, AND FILL SHALL BE PLACED AND / OR COMPACTED PER THE GEOTECHNICAL REPORT AND CITY OF ALBUQUERQUE SPECIFICATIONS.
- 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.
- UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AS SHOWN ON PLAN. COMPACT WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE INDICATED.
- EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. 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.
- OWNER WILL PROVIDE SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS. CONTRACTOR SHALL ALLOW TESTING LABS TO INSPECT AND APPROVE COMPACTED SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHOULD COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT THE CONTRACTOR'S SOLE EXPENSE.
- OWNER HAS ESTABLISHED PROPERTY BOUNDARY CORNERS. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS AT CONTRACTOR'S SOLE EXPENSE.
- THE ENVIRONMENTAL PROTECTION AGENCY AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES (INCLUDING OTHER LAND-DISTURBING ACTIVITIES) DISTURB ONE ACRE OR MORE (BY OTHERS). A SWPPP MUST BE INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING OR BUILDING PERMIT. THE SWPPP MUST BE IN PDF OR MS WORD FORMAT ON A CD.
- 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.
- POND DESIGN PARAMETERS (TOP OF POND, BOTTOM OF POND, SIZE OF ORIFICE, AREA OF POND, ETC.) TO BE STRICTLY ADHERED TO FOR CERTIFICATION PURPOSES. SEE DETAIL SHEET FOR ADDITIONAL INFORMATION.
- OWNER SHALL MAINTAIN EROSION PROTECTION ELEMENTS. OWNER SHALL INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.

### CALCULATIONS

CALCULATIONS: Lot 2, McMahon Marketplace :

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

ON-SITE CALCULATIONS: 100-YEAR, 6-HOUR STORM

AREA OF SITE: 52715.932 SF = 1.2

HISTORIC FLOWS:

	Treatment	%
Area A	0	0%
Area B	52715.932	100%
Area C	0	0%
Area D	0	0%
Total Area	52715.932	100%

DEVELOPED FLOWS:

	Treatment	%	EXCESS PRECIP:
Area A	0	0%	Precip. Zone 1
Area B	2636	5%	E <sub>A</sub> = 0.44
Area C	5272	10%	E <sub>B</sub> = 0.67
Area D	44809	85%	E <sub>C</sub> = 0.99
Total Area	52715.932	100%	E <sub>D</sub> = 1.97

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

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

Historic = 0.67 in. Developed E = 1.81 in.

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

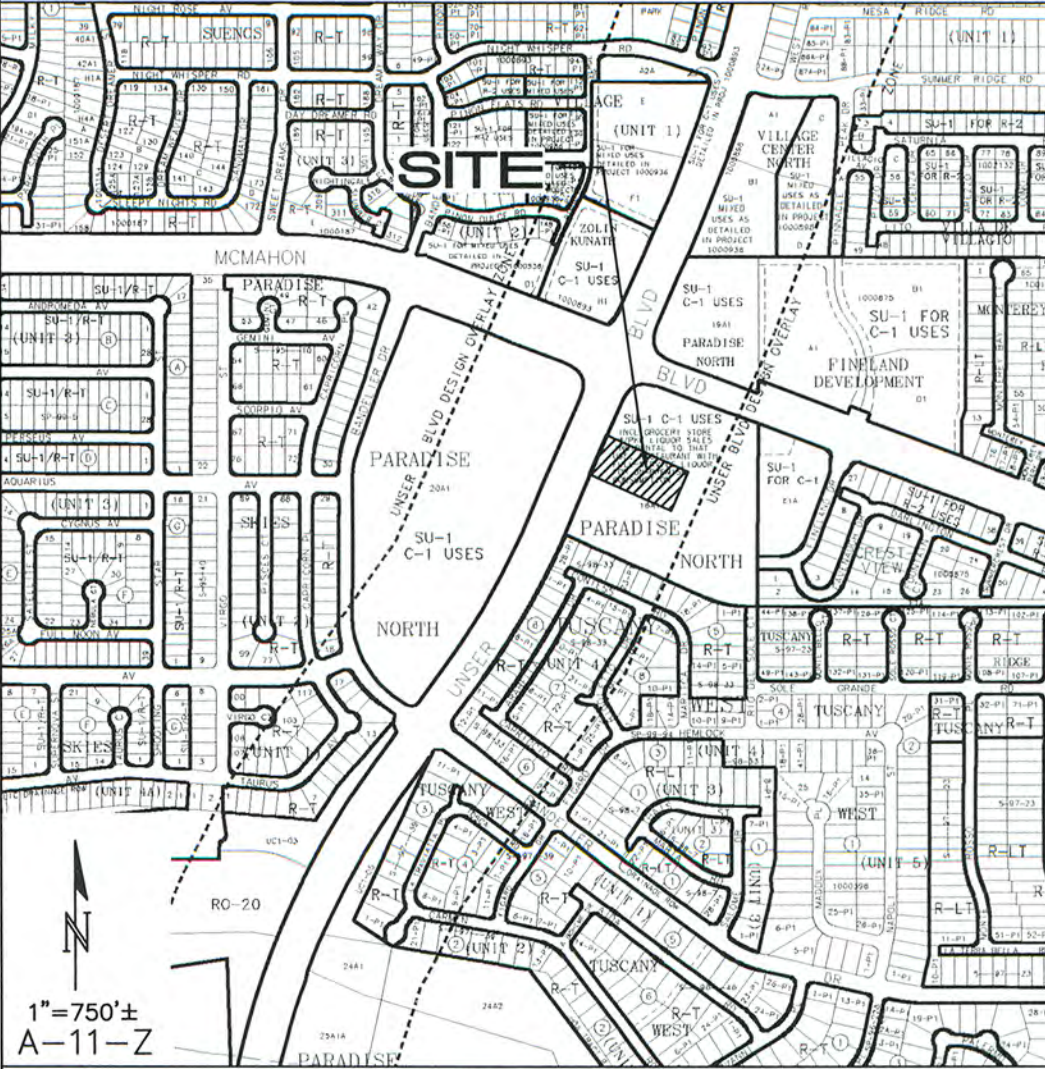
Historic = 2943 CF Developed V = 7938 CF

On-Site Peak Discharge Rate: Q<sub>p</sub> = Q<sub>pA</sub>A<sub>A</sub> + Q<sub>pB</sub>A<sub>B</sub> + Q<sub>pC</sub>A<sub>C</sub> + Q<sub>pD</sub>A<sub>D</sub>

For Precipitation 1.1

Q <sub>pA</sub>	= 1.29	Q <sub>pC</sub>	= 2.87
Q <sub>pB</sub>	= 2.03	Q <sub>pD</sub>	= 4.37
Historic	= 2.5 CFS	Developed Q	= 5.0 CFS

### VICINITY MAP



### PROJECT DATA

LEGAL DESCRIPTION: LOT 2, MCMAHON MARKETPLACE

SITE AREA: 1.2102 ACRES

FLOOD ZONE: The subject property (as shown hereon) lies within Zone "X" (areas determined to be outside 0.2% annual chance flood plain) as shown shown on National Flood Insurance Program Flood Insurance Rate Map Number 35001C0104G, Map Revised September 26, 2008.

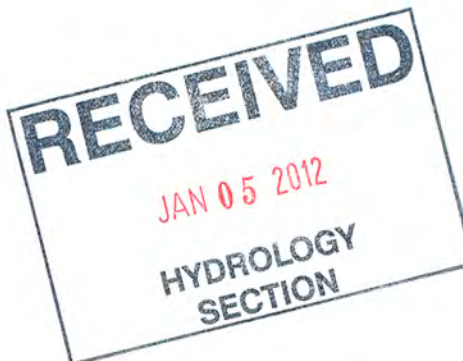
ENGINEER: GENEVIEVE DONART  
ISAACSON & ARFMAN, P.A.  
128 MONROE ST NE, ABQ, NM 87108  
PHONE: (505) 268-8828

SURVEYOR: SURV-TEK, INC.  
9384 VALLEY VIEW DR NW, ABQ, NM 87114  
PHONE: (505) 897-3366

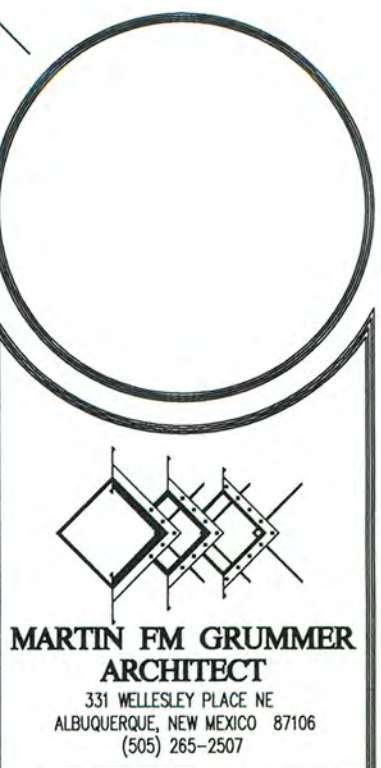
BENCHMARK: Vertical Datum is based upon the Albuquerque Control Survey Monument "9-A11",  
Elevation = 5301.647 (NAVD 1988).

DRAINAGE CONCEPT: THIS SITE IS A 1.2 AC PROPERTY WITHIN THE MCMAHON MARKETPLACE DRAINAGE MANAGEMENT PLAN (DMP) DATED 05/07/10 PREPARED BY BOHANNON-HUSTON, INC. THE SITE IS UNDEVELOPED, BUT SOME ON-SITE GRADING WAS PERFORMED AS PART OF THE LOT 1 CONSTRUCTION. THE SITE COVERS BASIN C-1, AND A PORTION OF BASINS E-1, E-2, AND F OF THE DMP. THE FULLY DEVELOPED CONDITION FOR BASINS E-1, E-2 AND F ALLOW FOR A TOTAL OF 20.97 cfs (4.99 Ac. AT 5% B, 10% C, & 85% D), AND BASIN C-1 0.08 cfs (0.08 Ac. AT 100% D). PROPORTIONALLY, THIS SITE IS ALLOWED A TOTAL DISCHARGE OF 5.10 cfs.  $\{(1.21-0.08)/4.99\} \times 20.97 + 0.35 = 5.10$  cfs. AN EXISTING INLET ON THE NORTHEAST CORNER OF THE PROPERTY CAPTURES FLOWS FROM BASINS C-1 AND E-1, AND STORM WATER FROM BASIN E-1 IS DIRECTED ACROSS THE SITE TO LOT 1. THE NEWLY DEVELOPED SITE WILL HAVE A TOTAL DISCHARGE OF 5.0 CFS, WHICH IS BELOW THE ALLOWED AMOUNT OF 5.1 CFS.

### LEGEND



ISAACSON & ARFMAN, P.A.  
Consulting Engineering Associates  
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Albuquerque, New Mexico 87108  
Ph. 505-268-8828 www.iacivil.com  
1897 CG-101.dwg Jan 04, 2012



McMAHON MARKET PLACE  
S.E.C. OF UNSER AND MCMAHON  
ALBUQUERQUE, NM 87124  
CONCEPTUAL GRADING AND  
DRAINAGE PLAN

DATE: 18 NOV 2011  
DRAWN BY: GLD  
CHECKED BY: GLD  
VERIFIED BY:

REVISIONS

SHEET NO:

CG-101