

# CITY OF ALBUQUERQUE

*Planning Department*  
Brennon Williams, Director



*Mayor Timothy M. Keller*

March 11, 2021

Fred Arfman, P.E.  
Isaacson & Arfman, Inc.  
128 Monroe St. NE  
Albuquerque, NM 87108

**RE: McMahon Marketplace  
5720 McMahon Blvd.  
Permanent C.O. - Approved  
Engineer's Certification Date: 3/2/21  
Engineer's Stamp Date: 8/1/19  
Hydrology File: A11D011H**

Dear Mr. Arfman:

PO Box 1293

Based on the certification received 3/2/21 and a site visit on 3/11/21, this certification is approved for Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3986 or [earmijo@cabq.gov](mailto:earmijo@cabq.gov).

NM 87103

Sincerely,

[www.cabq.gov](http://www.cabq.gov)

Ernest Armijo, P.E.  
Principal Engineer, Planning Dept.  
Development Review Services



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

McMahon Market Place

**Project Title:** New Shell Building Building Permit #: \_\_\_\_\_ Hydrology File #: A11D011H

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: Lots 5A & 6A-1, McMahon Marketplace

City Address: 5720 McMahon Blvd. NW - Albuquerque, NM 87114

**Applicant:** Isaacson & Arfman, Inc. Contact: Fred C. Arfman or  
Bryan J. Bobrick

Address: 128 Monroe Street NE - Albuquerque, NM 87108

Phone#: (505) 268-8828 Fax#: \_\_\_\_\_ E-mail: freda@iacivil.com  
bryan@iacivil.com

**Owner:** \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

**TYPE OF SUBMITTAL:** \_\_\_\_\_ PLAT (\_\_\_\_# OF LOTS) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL?: ☒ Yes \_\_\_\_\_ No

**DEPARTMENT:** \_\_\_\_\_ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

### TYPE OF SUBMITTAL:

- ☒ ENGINEER ARCHITECT CERTIFICATION  
\_\_\_\_ PAD CERTIFICATION  
\_\_\_\_ CONCEPTUAL G & D PLAN  
\_\_\_\_ GRADING PLAN  
\_\_\_\_ DRAINAGE MASTER PLAN  
\_\_\_\_ DRAINAGE REPORT  
\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT APPLIC  
\_\_\_\_ ELEVATION CERTIFICATE  
\_\_\_\_ CLOMR/LOMR  
\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)  
\_\_\_\_ TRAFFIC IMPACT STUDY (TIS)  
\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_  
\_\_\_\_ PRE-DESIGN MEETING?

### TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- \_\_\_\_ BUILDING PERMIT APPROVAL  
☒ CERTIFICATE OF OCCUPANCY  
\_\_\_\_ PRELIMINARY PLAT APPROVAL  
\_\_\_\_ SITE PLAN FOR SUB'D APPROVAL  
\_\_\_\_ SITE PLAN FOR BLDG. PERMIT APPROVAL  
\_\_\_\_ FINAL PLAT APPROVAL  
\_\_\_\_ SIA/ RELEASE OF FINANCIAL GUARANTEE  
\_\_\_\_ FOUNDATION PERMIT APPROVAL  
\_\_\_\_ GRADING PERMIT APPROVAL  
\_\_\_\_ SO-19 APPROVAL  
\_\_\_\_ PAVING PERMIT APPROVAL  
\_\_\_\_ GRADING/ PAD CERTIFICATION  
\_\_\_\_ WORK ORDER APPROVAL  
\_\_\_\_ CLOMR/LOMR  
\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT  
\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_

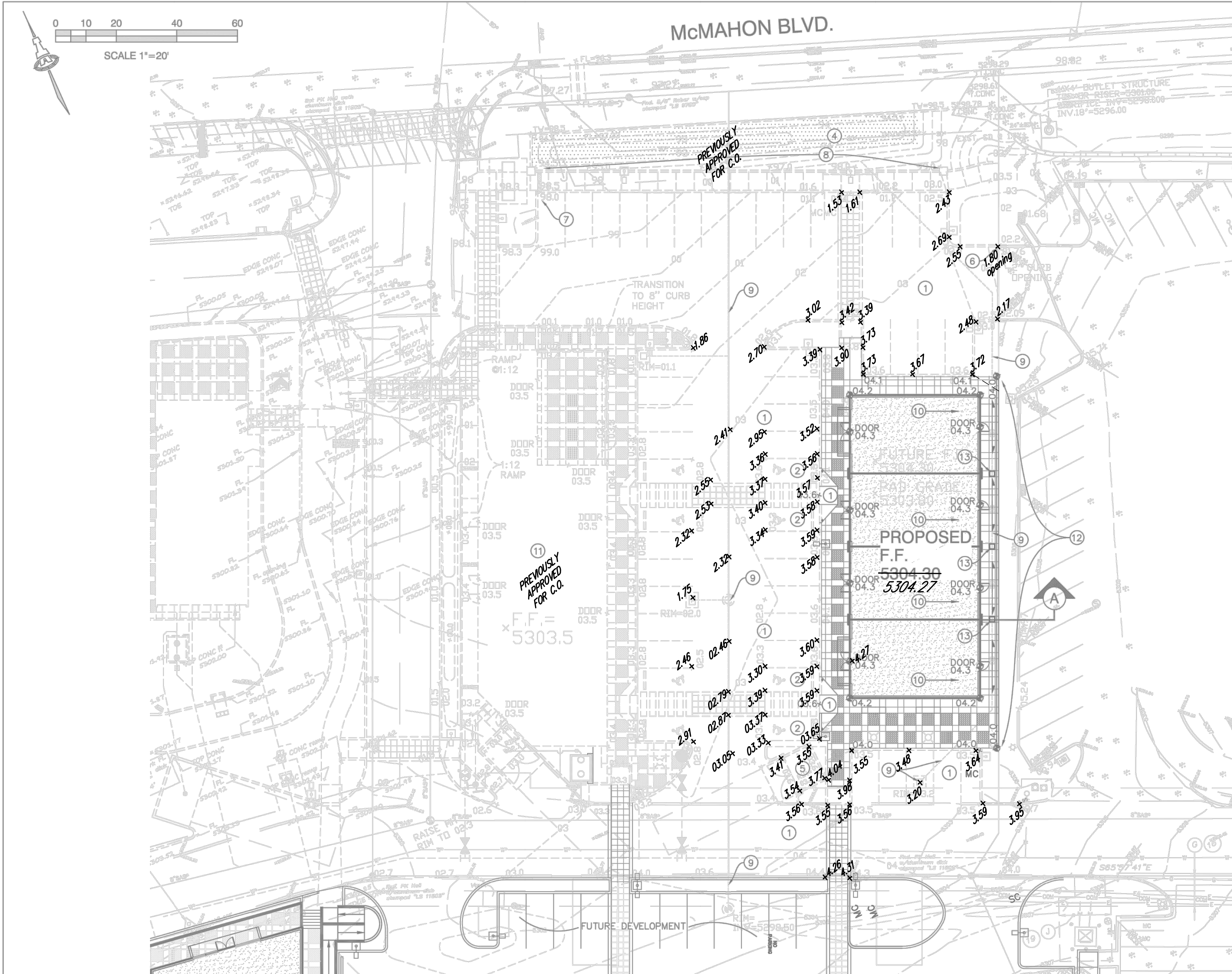
DATE SUBMITTED: March 2, 2021 By: Fred C. Arfman

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_





### GENERAL NOTES

- A. PROPOSED SPOT AND CONTOUR ELEVATIONS 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.
- B. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR INSTRUCTIONS.
- C. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AN NPDES PERMIT, AND AN EROSION AND SEDIMENT CONTROL (ESC) PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. (SWPPP, NPDES PERMIT, AND ESC PLAN BY OTHERS.) A CURRENT CITY-APPROVED ESC PERMIT MUST BE INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING, BUILDING, OR WORK ORDER PERMIT.
- D. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.
- E. TRANSITIONS BETWEEN NEW AND EXISTING SHALL BE SMOOTH.
- F. PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. FOR ALL ACCESSIBLE ROUTES, MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%. FOLLOW ALL ADA ACCESSIBILITY GUIDELINES OR CITY CODES, WHICHEVER IS MORE STRINGENT.
- G. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
- H. FOR ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE (FOR CERTIFICATE OF OCCUPANCY) CONTRACTOR SHALL PROVIDE AN AUTOCAD FORMAT AS-BUILT SURVEY PREPARED BY A LICENSED SURVEYOR WHICH

#### INCLUDES:

- AS-BUILT SPOT ELEVATIONS AT EACH DESIGN SPOT ELEVATION SHOWN ON THE APPROVED PLAN;
  - ALL CONSTRUCTION, INCLUDING DRAIN INLETS, PIPES AND PONDS SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN IN ORDER TO RECEIVE ENGINEER'S CERTIFICATION.
- M. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO PROPOSED STORM DRAINS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, INLETS, TESTING AND CLEANING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
- N. MINIMUM COVER FOR STORM DRAIN PIPES SHALL BE 12", UNLESS OTHERWISE NOTED.
- O. CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTIONS TO ROOF DOWNSPOUTS AND ALL NECESSARY FITTINGS. FITTING COSTS SHALL BE INCIDENTAL.
- P. TRENCHING, BORING, AND JACKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA SPEC. SECT. 700. ALL BACKFILL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY PER ASTM D-1557.
- Q. ALL INLET AND AREA DRAIN RINGS & GRATES, MANHOLE RINGS & COVERS, AND OTHER SURFACE FEATURES SHALL BE ADJUSTED TO FINISHED GRADE, UNLESS OTHERWISE NOTED ON THE PLANS.
- R. HDPE PIPE SHALL BE ADS N-12 (WATERTIGHT) OR ENGINEER APPROVED EQUIVALENT. HDPE PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- S. PVC PIPES SHALL BE PVC SDR-35, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

I, Fred C. Arfman, NMPE No. 7322 of the firm Isaacson & Arfman, Inc. 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 08-16-19. The record information edited onto the original design document has been obtained by Brian Martinez, NMPS No. 18374 of the firm Cartesian Surveys. I further certify that I or a member of my firm under my direct supervision have visited the project site on 11-17-20 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for permanent Certificate of Occupancy.

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.



Fred C. Arfman  
Fred C. Arfman, NMPE No. 7322

03/02/21  
DATE

### KEYED NOTES

- EXISTING PAVING / WALKS / CROSSWALKS / CURB AND GUTTER.
- EXISTING HC PARKING AREA.
- CONSTRUCT ADA COMPLIANT HANDICAP ACCESS RAMP AT ELEVATIONS SHOWN (1" PER FOOT - LENGTH VARIES). MAX. 2% CROSS-SLOPE. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
- EXISTING 'FIRST FLUSH' RETENTION AND DETENTION PONDING.
- EXISTING CONCRETE DUMPSTER PAD AND ENCLOSURE.
- EXISTING CURB OPENING AT FLOWLINE SHOWN.
- EXISTING COVERED SIDEWALK CULVERT.
- EXISTING RETAINING WALL.
- EXISTING PRIVATE STORM DRAIN SYSTEM.
- EXTEND LOT 6A1 ROOF DISCHARGE PIPE DIRECTLY 8"Ø EAST STORM DRAIN SYSTEM USING FITTINGS AS REQUIRED. SEE PLUMBING PLANS FOR SPECIFIC DISCHARGE LOCATIONS.
- EXISTING LOT 5A ROOF DISCHARGE IS RELEASED TO WEST SIDE OF BUILDING.
- CONSTRUCT 123 LF CONCRETE GARDEN WALL ALONG EDGE OF NEW WALK TO TRANSITION GRADES. TOP OF WALL = 05.5 TYPICAL. SEE SECTION A.
- INSTALL ADS INLINE DRAIN WITH 12" SQUARE HINGED GRATE @ 25' O.C. (THREE TOTAL) AT RIM = 04.0. LOCATE EQUIDISTANCE FROM DOORS. PROVIDE WATERTIGHT CONNECTION TO EXISTING 8" STORM DRAIN USING FITTINGS AS REQUIRED. SLOPE WALK TO INLETS.

### CALCULATIONS

CALCULATIONS: McMahon Marketplace - Lot 6A1 : August 1, 2019

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: 23201 SF = 0.53

#### DEVELOPED FLOWS:

Treatment S	%	EXCESS PRECIP:
Area A	0	0%
Area B	1160	5%
Area C	1856	8%
Area D	20185	87%
Total Are	23201	100%

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

Weighted E =  $\frac{E_A A + E_B B + E_C C + E_D D}{A + B + C + D}$

Developed E = 1.83 in.

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

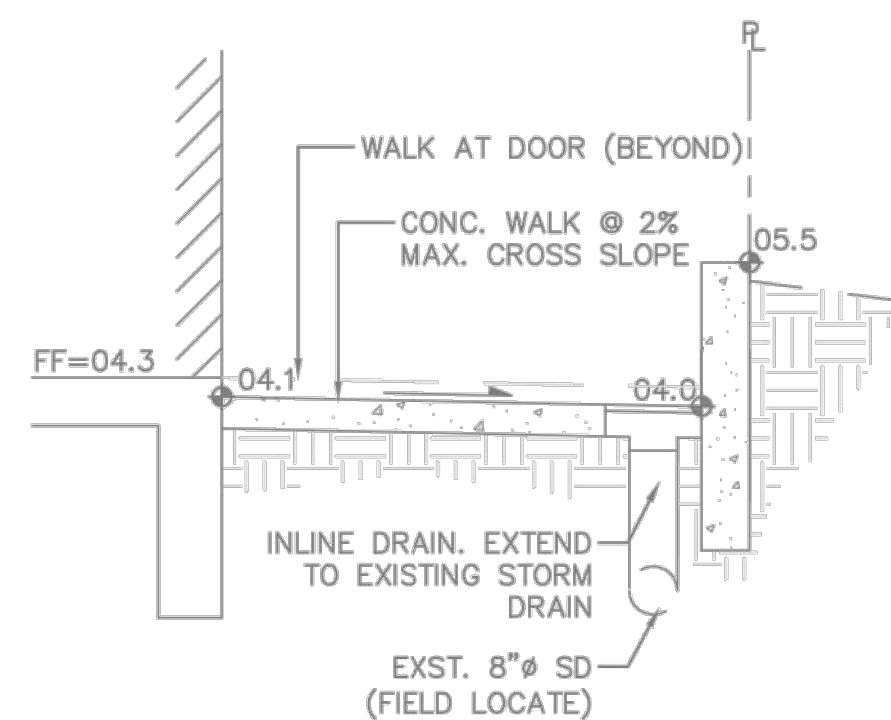
Developed V36 = 3532 CF

On-Site Peak Discharge Rate:  $Q_p = Q_{pA}A + Q_{pB}B + Q_{pC}C + Q_{pD}D / 43,560$

For Precipitation Zo 1

QpA	= 1.29	QpC	= 2.87
QpB	= 2.03	QpD	= 4.37
		Developed Qp	= 2.2 CFS

### SECTION A



### LEGEND

×03.4	EXISTING SPOT ELEVATION
---06---	EXISTING CONTOUR
—06—	PROPOSED CONTOUR (1' INCREMENT)
06.32	PROPOSED SPOT ELEVATION
06.32	AS-BUILT SPOT ELEVATIONS
→	FLOW ARROW
F.F.=	FINISH FLOOR ELEVATION
[Pattern]	EXISTING FIRST FLUSH RETENTION PONDING AREA

### VICINITY MAP



### PROJECT DATA

PROPERTY: THE SITE IS A DEVELOPED COMMERCIAL PROPERTY WITHIN C.O.A. VICINITY MAP A-11. THE SITE IS BOUND TO THE EAST, SOUTH AND WEST BY MCMAHON MARKETPLACE DRIVES AND COMMERCIAL PROPERTIES AND NORTH BY MCMAHON BLVD.

SITE AREA: 1.22 ACRES

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE TWO MULTI-UNIT RETAIL PADS, PAVED PARKING, PEDESTRIAN WALKS, DRAINAGE IMPROVEMENTS, AND LANDSCAPING.

LEGAL: LOTS 5A AND 6A-1, MCMAHON MARKETPLACE, CITY OF ALBUQUERQUE, NEW MEXICO.

BENCHMARK: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY MONUMENT "9-A11", ELEVATION = 5301.647 (NAVD 1988)

OFF-SITE: A PORTION OF LOT 8 (DEVELOPED) AND LOT 9 (PARTIALLY DEVELOPED) WILL CONTINUE TO DRAIN THROUGH THIS PROPERTY AS PROVIDED IN THE AMENDED DRAINAGE MANAGEMENT PLAN.

FLOOD HAZARD: PROPERTY IS LOCATED WITHIN ZONE X, DESIGNATING AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN ACCORDING TO THE FLOOD INSURANCE RATE MAP, BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS MAP NO. 35001C0104H, MAP REVISED AUGUST 16, 2012.

DRAINAGE PLAN CONCEPT: PER THE AMENDED DRAINAGE MANAGEMENT PLAN PREPARED BY ISAACSON & ARFMAN PA DATED 07-13-17, THE WHOLE OF THE MCMAHON MARKETPLACE PROPERTY MAY DISCHARGE 41.55 CFS.

LOT 6A1 WAS FULLY ANALYZED AS PART OF CABQ HYDROLOGY FILE A11D011H AND THE MAJORITY OF THE SITE INFRASTRUCTURE WAS CONSTRUCTED ALONG WITH THE ADJACENT PROPERTY (LOT 5A). THIS INCLUDED SITE PAVEMENT, CURB& GUTTER, STORM DRAIN IMPROVEMENTS, ALL STORMWATER QUALITY AND DETENTION PONDING, ETC.

STORMWATER CONTROL MEASURES: ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM.

THE SHARED POND ON THE NORTH END OF THE PROPERTY WAS CONSTRUCTED AS PART OF THE LOT 5A/6A1 CONSTRUCTION. THIS POND PROVIDES FOR THE FULL STORMWATER QUALITY RETENTION REQUIREMENT. ALL STORM WATER FROM THE IMPERVIOUS AREAS ARE DIRECTED TO THIS POND.

ENGINEER: FRED C. ARFMAN, NMPE 7322  
ISAACSON & ARFMAN, PA  
128 MONROE NE, 87111  
TELEPHONE: (505) 268-8828

SURVEYOR: RUSS P. HUGG, NMPS No. 9750  
SURV-TEK, INC.  
9384 VALLEY VIEW DR. NW, 87114  
TELEPHONE: (505) 897-3366

### CONSTRUCTION STAKING / LAYOUT

UPON WRITTEN REQUEST COORDINATED THROUGH THE PROJECT ARCHITECT, THE ELECTRONIC FILE OF THE GRADING AND DRAINAGE WILL BE PROVIDED TO THE CONTRACTOR FOR VERTICAL CONTROL. DO NOT USE THIS PLAN FOR PROJECT STAKING.

SITE CONSTRUCTION LAYOUT / STAKING SHALL BE COORDINATED WITH THE ARCHITECT USING THE ARCHITECT PROVIDED SITE PLAN.



ALL DIMENSIONS ARE TO BE FIELD VERIFIED. IF THERE ARE DISCREPANCIES, PLEASE NOTIFY THE ARCHITECT. DRAWING ARE NOT TO BE SCALED. USE DIMENSIONS FOR ACCURACY.

McMAHON MARKET PLACE  
NEW SHELL BUILDING  
5720 McMAHON BLVD NW  
ALBUQUERQUE, NM 87114

GRADING & DRAINAGE PLAN

DATE:  
12 JAN 2017

DRAWN BY:  
BJB

CHECKED BY:  
FCA

VERIFIED BY:

#### REVISIONS

NO.	DESCRIPTION

SHEET NO:

CG-1