

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

July 20, 2017

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM, 87108

**RE: McMahon Market Place
Amended Drainage Management Plan
Stamp Date: 7/13/17
Hydrology File: A11D011G**

Dear Mr. Arfman:

Based upon the information provided in your submittal received 7/19/17, the Amended Drainage Management Plan **is not** approved for Site Plan for Subdivision and Site Plan for Building Permit. The following comments need to be addressed for approval of the above referenced project:

1. Under Project Information, the benchmark information and the flood hazard information are duplicates. These notes are under the Project Data. These can be removed.
2. Under Project Data, the second flood hazard information is a duplicate. This can be removed.
3. Under Project Information, the off-site information can be placed under the Project Data.
4. Under Project Data in the First Flush Retention note, The last sentence should read; "Storm water will then either free discharge (85% land treatment 'D') to McMahon Blvd pubic storm sewer or flow into a detention facility which will then regulate the discharge to McMahon Blvd pubic storm sewer."
5. Under Drainage Concept, Please correct required detention equation to read $19.8 - 13.55 = 6.25$ cfs.

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

6. Under Drainage Concept, for the detention required, please show the detention amount of what is proposed in the Lot 5 & 6A development and what is proposed in Lot 9. I know that the Lot 9 will be further phased.
7. Please provide in your supplemental information letter, an exhibit showing the conceptual detention pond for the Lot 5 & 6A development.
8. Please provide in your supplemental information letter, please provide calculations for the conceptual detention pond for the Lot 5 & 6A development.
9. Please provide in your supplemental information letter, an exhibit showing the conceptual control which will limit the discharge into the McMahon Blvd public storm sewer.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

PO Box 1293

Sincerely,

Reneé C. Brissette

Albuquerque

Reneé C. Brissette, P.E.
Senior Engineer, Hydrology
Planning Department

New Mexico 87103

www.cabq.gov



July 12, 2017

René Brissette, P.E.
Senior Engineer, Hydrology
City of Albuquerque, Planning Dept.

RE: McMahon Market Place AMENDED DRAINAGE MANAGEMENT PLAN – DRB 1005280

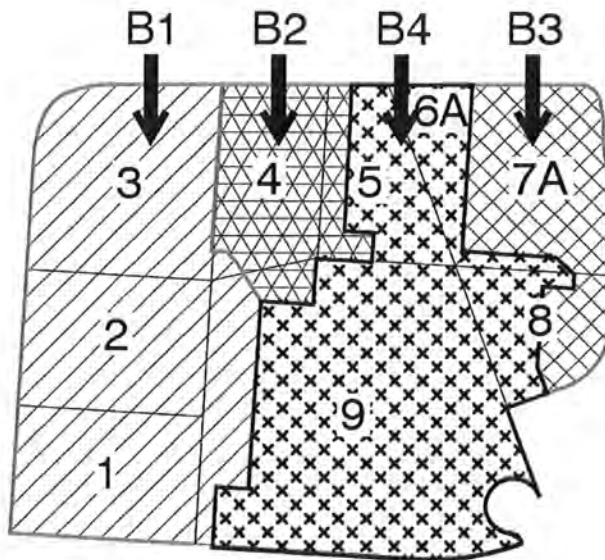
Dear Ms. Brissette,

Included with this response is a copy of the revised Amended Drainage Management Plan for the above referenced project. Revisions were made based on your DRB review comments as follows:

1. Existing and proposed topography on adjacent lots are provided as available on the current topographic survey.
2. The discharge allowed as each lot develops is provided along with Phased Site Discharge notes.
3. Pertinent pages from the Covenants, conditions, restrictions and cross-easement agreements are attached. Per page 9, *“each Owner shall operate and maintain, or cause to be operated and maintained, in good order, condition and repair, the Drainage Facilities located upon its parcel and make any and all repairs and replacements that may from time to time be required with respect thereto.”*
4. Drainage basins for the overall Drainage Management Plan have been provided. On-site, lot drainage sub-basins will be generated as each lot is designed for building permit submittal.
5. Discharge from the property will not exceed the allowable discharge rate of 41.55 cfs. No analysis of downstream structures is provided. Proposed on-site structures will be analyzed as part of the building permit process (specific inlet locations and extent of private storm drain system is conceptual.)
6. Conceptual first flush volumes are noted for each remaining lot. If surface retention ponding is not achievable, underground first flush retention will be provided.
7. The plan is clearly identified as “Not for Construction”. The engineer’s stamp with signature / date has been added.
8. Floodplain note and FEMA map number have been added to the plan.

As noted in your comments, the McMahon Marketplace DMP governs the entire 12.13 acre McMahon Marketplace. The DMP notes "The future development can either create a pond to restrict the flow to the 41.55 cfs or modify the amount of landscaping to reduce the amount of Land Treatment Type 'D' to reduce the runoff." As the overall property continues to develop, the 41.55 cfs maximum discharge rate will be revisited with each submittal.

The following discharge rates will be used as future lots develop:



MCMAHON MARKETPLACE - OVERALL

BASIN B1: LOTS 1, 2, 3, PORTIONS OF LOTS 4 AND 9 (4.6 ACRE) = 19.1 CFS

B1	123	DESCRIPTION	Lots 1, 2 and 3 fully developed
Area of basin flows =	174497	SF	= 4.0 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)			LAND TREATMENT
Weighted E = 1.82 in.			A = 0%
Sub-basin Volume of Runoff (see formula above)			B = 0%
V ₃₆₀ = 26509 CF			C = 15%
Sub-basin Peak Discharge Rate: (see formula above)			D = 85%
Q _p = 16.6 cfs			
B1	4-Sep	DESCRIPTION	PORTIONS OF LOT 9&4 TO WEST SD
Area of basin flows =	26512	SF	= 0.6 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
Sub-basin Weighted Excess Precipitation (see formula above)			LAND TREATMENT
Weighted E = 1.81 in.			A = 0%
Sub-basin Volume of Runoff (see formula above)			B = 5%
V ₃₆₀ = 3992 CF			C = 10%
Sub-basin Peak Discharge Rate: (see formula above)			D = 85%
Q _p = 2.5 cfs			

BASIN B2: PORTIONS OF LOTS 4, 5 AND 9 (1.2 ACRE) = 4.8 CFS

B2	14,5,9(PARTIAL)	DESCRIPTION	LOT 4 (REMAINDER), PORTION OF LOTS 5 AND 9
Area of basin flows =	53905	SF	= 1.2 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
		LAND TREATMENT	
Sub-basin Weighted Excess Precipitation (see formula above)		A =	0%
Weighted E =		B =	15%
Sub-basin Volume of Runoff (see formula above)		C =	11%
V ₃₆₀ =		D =	74%
Sub-basin Peak Discharge Rate: (see formula above)			
Q _P =			4.8 cfs

BASIN B3: LOT 7A, PORTION OF LOT 8 (1.5 ACRE) = DETAINED : 4.07 CFS

B3		DESCRIPTION	LOT 7, REMAINDER OF LOT 8 TO DETENTION A
Area of basin flows =	64178	SF	= 1.5 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
		LAND TREATMENT	
Sub-basin Weighted Excess Precipitation (see formula above)		A =	0%
Weighted E =		B =	5%
Sub-basin Volume of Runoff (see formula above)		C =	10%
V ₃₆₀ =		D =	85%
Sub-basin Peak Discharge Rate: (see formula above)			
Q _P =			6.0 cfs

BASIN B4: LOT 6A, PORTION OF LOTS 5, 8 AND 9 (4.8 AC) = LIMITED TO 13.55 CFS (DETENTION REQUIRED)

B4	10	DESCRIPTION	LOT 6A, REMAINDER OF LOTS 5, 8 AND 9
Area of basin flows =	209811	SF	= 4.8 Ac.
The following calculations are based on Treatment areas as shown in table to the right			
		LAND TREATMENT	
Sub-basin Weighted Excess Precipitation (see formula above)		A =	0%
Weighted E =		B =	5%
Sub-basin Volume of Runoff (see formula above)		C =	10%
V ₃₆₀ =		D =	85%
Sub-basin Peak Discharge Rate: (see formula above)			
Q _P =			19.8 cfs

Please don't hesitate to call me or Fred Arfman with any questions.

Sincerely,

Isaacson & Arfman, PA

Bryan J. Bobrick
Project Manager

Fred C. Arfman, PE
Principal Engineer



COVENANTS, CONDITIONS, RESTRICTIONS AND CROSS-EASEMENTS AGREEMENT

This Covenants, Conditions, Restrictions and Cross-Easements Agreement ("**Agreement**") is made as of the 13th day of November, 2009, by and between Peterson Inv -McMahon, LLC, a New Mexico limited liability company ("**Peterson**"); JMD - McMahon, LLC, a New Mexico limited liability company ("**JMD**"); and Mark Gonzales, Jennie Gonzales, and Elsie Gonzales (collectively "**Gonzales**"). The foregoing shall hereinafter sometimes be collectively referred to as the "Parties" or individually as a "Party".

PREAMBLE

A. Whereas, Peterson is, or will become, the fee owner of that certain parcel of real property located at the southeast corner of Unser Blvd. and McMahon Blvd. in the City of Albuquerque, County of Bernalillo, State of New Mexico ("**Parcel 1**"), which real property is shown on Exhibit "A" and more particularly described in Exhibit "B-1" attached hereto and by this reference incorporated herein.

B. Whereas, JMD is the fee owner of that certain parcel of real property located at the southwest corner of Fineland Drive and McMahon Blvd. in the City of Albuquerque, County of Bernalillo, State of New Mexico ("**Parcel 2**"), which real property is shown on Exhibit "A" and more particularly described in Exhibit "B-2" attached hereto and by this reference incorporated herein.

C. Whereas, Gonzales is the fee owner of that certain parcel of real property located near the southeast corner of Unser Blvd. and McMahon Blvd. in the City of Albuquerque, County of Bernalillo, State of New Mexico ("**Parcel 3**"), which real property is shown on Exhibit "A" and more particularly described in Exhibit "B-3" attached hereto and by this reference incorporated herein.

D. Whereas, Parcels 1, 2, and 3 (collectively, the "**Property**") are located adjacent to each other at the southeast corner of Unser Blvd. and McMahon Blvd.



Bo

whatsoever (including attorneys fees and court costs) for any personal injury or property damage arising from or as a result of such Owner's use of a utility easement upon such other Owner's property or Common Area. Except as set forth hereinabove relating to utilities serving a single party, the Owner of each Parcel shall maintain, each at its sole cost and expense, in good condition and repair, those portions of the Utilities as exist on its respective Parcel.

(F) Without limiting the provisions of this Section 2.02, the initial conceptual utility plan is attached hereto as Exhibit "D" and may be adjusted from time to time as needed to accommodate the requests of governmental authority, utility providers, or the Owners in accordance with this Agreement.

Section 2.03. Drainage. (A) The Parties hereby jointly establish, grant and convey for the benefit of the entire Property, each Owner thereof, its successors, assigns and lessees, a perpetual, non-exclusive, reciprocal drainage easement over, upon, under and across the Common Area of each Parcel for the benefit of each other Parcel, for the purposes of drainage of storm and surface water. The Parties also hereby agree to establish, grant and convey non-exclusive and perpetual easements to each other to install, maintain, operate, repair and replace storm water collection, retention, detention and distribution lines, conduits, pipes and other drainage apparatus (the "**Drainage Facilities**") under and across the Common Area of each Parcel.

(B) The drainage easements granted hereby are solely for the purposes set forth above, provided, however, that in using the easements granted hereby, any Owner who goes, or causes its agent or any utility company to go, upon any other Owner's property or Common Area shall (i) give the other Owner(s) at least twenty (20) days prior written notice together with a drawing of any proposed installation or relocation of any Drainage Facilities; (ii) cause such use of its drainage easement to be conducted in a manner which, under the circumstances, is the least disruptive to the other Owner(s), their tenants, and the customers and invitees of each of them; (iii) cause such use to be completed with due regard for the safety of all persons coming onto such property or Common Area, and (iv) cause, at its expense, any damage to any other Owner's or its tenant's improvements (including without limitation, pavement) to be promptly repaired and restored as near as practicable to the prior condition of such improvement.

(C) Each such Owner shall be liable to such other Owners and tenants for any breach of the foregoing obligations, and each such Owner shall indemnify such other Owners and tenants and hold such other Owners and tenants free, clear and harmless from any and all claims, actions, demands, causes of action, costs and expenses whatsoever (including attorneys fees and court costs) for any personal injury or property damage arising from or as a result of such Owner's use of a drainage easement upon such other Owner's property or Common Area.

(D) Once constructed, (i) the Drainage Facilities shall not be modified, altered or otherwise changed, without the prior written consent of all Owners; and (ii) each Owner shall operate and maintain, or cause to be operated and maintained, in good order, condition and repair, the Drainage Facilities located upon its Parcel and make any and all repairs and replacements that may from time to time be required with respect thereto.

(E) Without limiting the provisions of this Section 2.03, the initial conceptual drainage plan is attached hereto as Exhibit "E" and may be adjusted from time to time as needed to accommodate the requests of governmental authority, utility providers, or the Owners in accordance with this Agreement.

ARTICLE III RESTRICTIONS

Section 3.01. Drugstore Exclusive. No portion of Parcel 2 or 3 shall be used for any of the following (which shall collectively be referred to hereinafter as the "**Drugstore Exclusive**"):

1. the sale of packaged beer, wine and alcoholic beverages for off premises consumption;
2. a prescription pharmacy or the sale of items requiring dispensing by or through a registered or licensed pharmacist, whether such dispensing is in connection with the operation of a mail order facility;
3. the operation of a business in which greeting cards or gift wrap are offered for sale (except that the incidental sale of said items in an

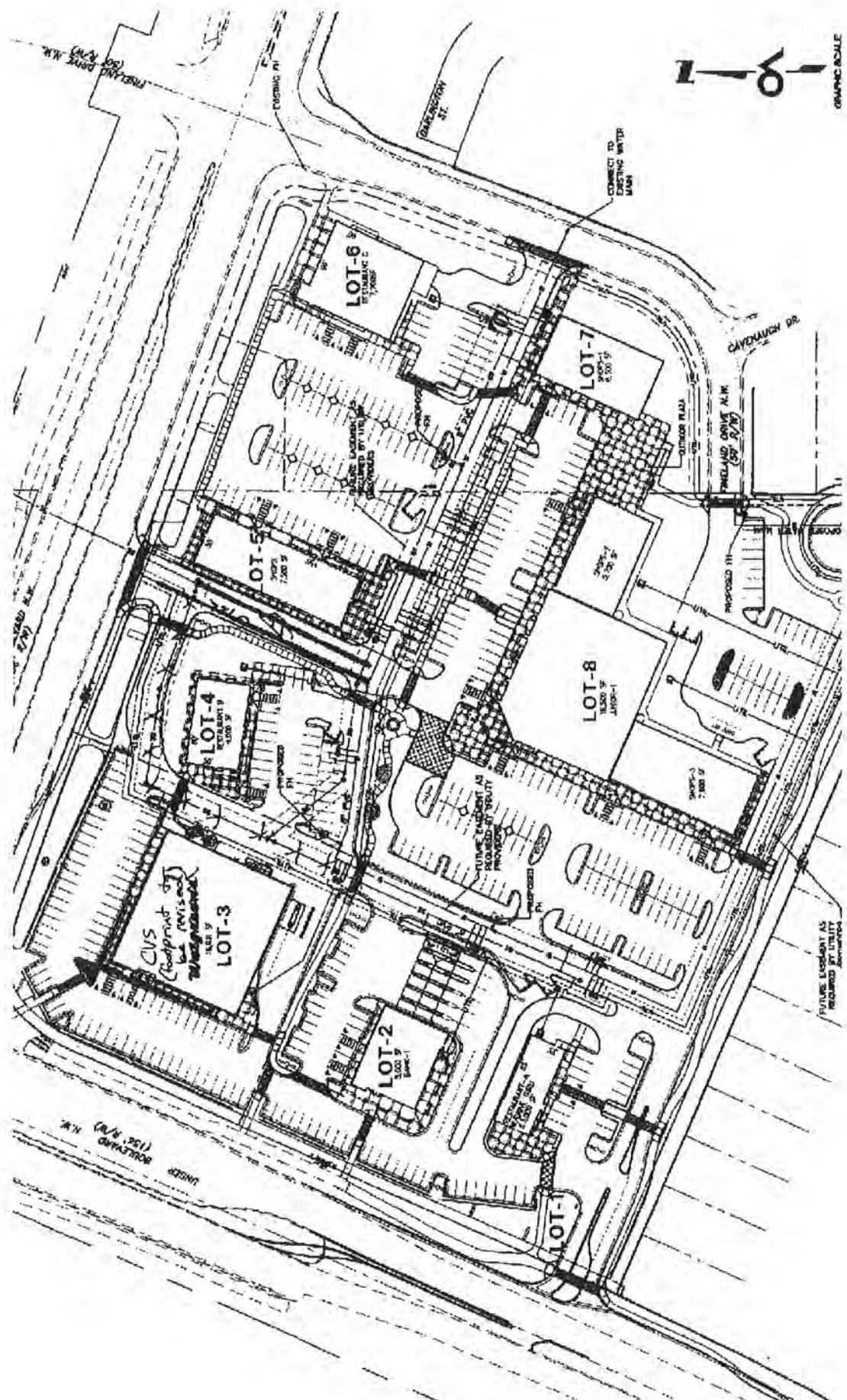


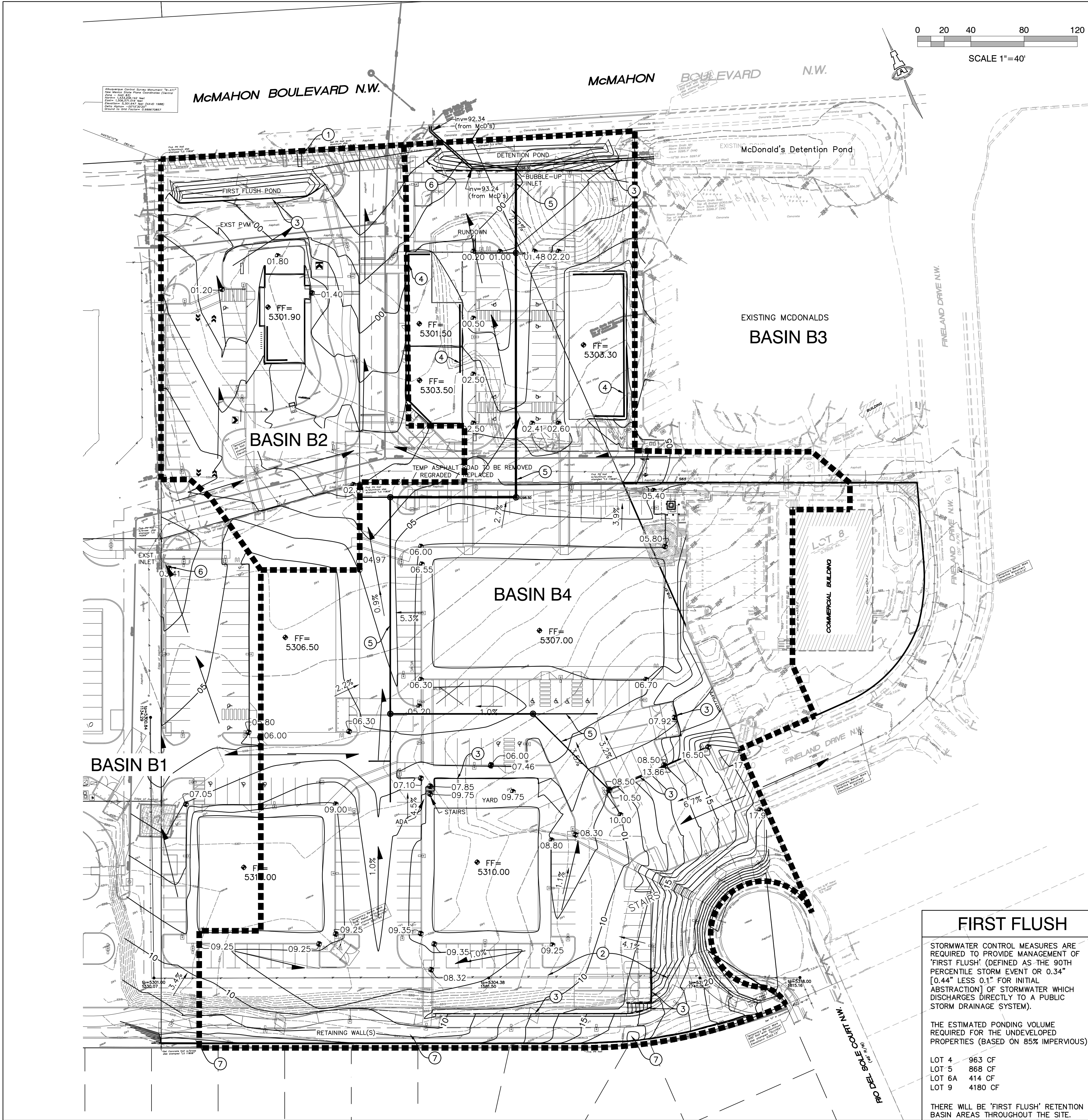
If to any other Owner or occupant:

To such address as such Owner or occupant shall designate in writing to the other Parties, or to the Owner's or occupant's address in the Property, if no other address is designated;

or to such address as is thereafter provided by the parties hereto. If written notice is hand delivered it shall be deemed received upon delivery. If written notice is sent via Federal Express, it shall be deemed received the next business day following the date of sending. If written notice is mailed via United States Certified or Registered Mail, it shall be deemed received upon the earlier of actual receipt or on the third business day following the date of mailing. If written notice is sent via facsimile, it shall be deemed received upon transmission provided successful transmission has been confirmed by a printed confirmation sheet. In addition, all notices sent by facsimile shall also be mailed via regular United States Mail.

Section 4.02. Maintenance. Each Owner shall at all times maintain its portion of the Property and all improvements thereon in a safe, clean, neat, attractive and sanitary condition as appropriate for a first class commercial property, and in all respects in compliance with all governmental zoning, health, fire and police requirements. By way of illustration and not limitation, such maintenance shall include (i) maintaining the surfaces of all driveways and parking areas of its portion of the Property in a level, smooth and evenly covered condition with asphalt pavement or similarly appropriate surfacing material; (ii) planting, weeding, irrigating, pruning and otherwise maintaining landscaping on all of its portions of the Property (including any landscaping within the adjacent public right-of-way, to the extent the same is not maintained by the city or another governmental entity) which are not covered by a structure or paving; (iii) repainting, cleaning and repairing the exterior of all buildings and other improvements on a regular basis; (iv) removing all trash, refuse, papers and debris; (v) placing and keeping in repair and replacing as necessary directional signs, markers, lines and striping; and (vi) operating, keeping in repair and replacing as necessary such artificial lighting facilities as shall be reasonably required for the safe and attractive condition of its portion of the Property.





FIRST FLUSH

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 ESTIMATED PONDING VOLUME REQUIRED FOR THE UNDEVELOPED PROPERTIES (BASED ON 85% IMPERVIOUS)

LOT 4	963 CF
LOT 5	868 CF
LOT 6A	414 CF
LOT 9	4180 CF

THERE WILL BE 'FIRST FLUSH' RETENTION BASIN AREAS THROUGHOUT THE SITE. STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE BASINS VIA CURB OPENINGS AND ON-SITE STORM DRAIN.

THE 'FIRST FLUSH' BASIN VOLUMES SHALL BE ANALYZED AND SIZED AS PART OF THE BUILDING PERMIT PLANS SUBMITTAL. CURB OPENING LOCATIONS WILL BE LOCATED AND SIZED WITH FINAL DESIGN.

DRAINAGE CONCEPT

PER THE APPROVED MCMAHON DRAINAGE MANAGEMENT PLAN (DMP) BY BOHANNAN HUSTON INC. DATED MAY 7, 2010, THE ENTIRE 12.13 ACRE MCMAHON MARKETPLACE (PROPERTY) IS PERMITTED TOTAL DISCHARGE OF 41.55 CFS.

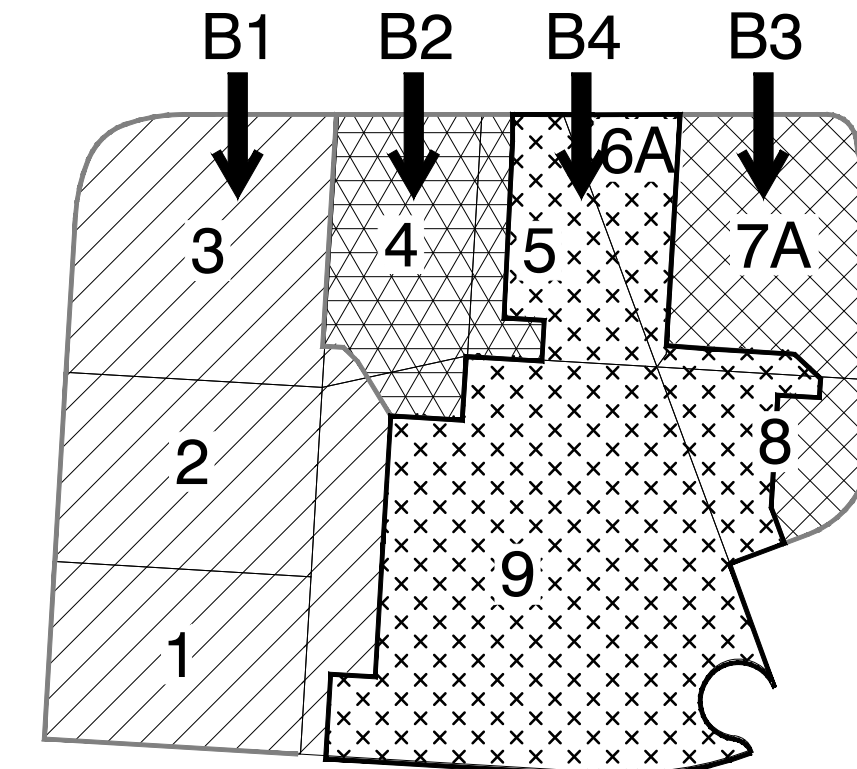
- BASIN B1 (4.6 ACRE):**
LOTS 1, 2, 3 (4.0 ACRE)
FREE DISCHARGE @ LAND TREATMENT RATIO 0.5:10:85
DISCHARGE = 16.6 CFS.

PORTION OF LOTS 9 AND 4 (0.6 ACRE)
FREE DISCHARGE @ LAND TREATMENT RATIO 0.5:10:85
DISCHARGE = 2.5 CFS

BASIN WILL CONTINUE TO DRAIN TO THE WEST PRIVATE STORM DRAIN SYSTEM. THE DISCHARGE FROM THESE PROPERTIES = 19.1 CFS TO ENTER THE PUBLIC STORM DRAIN SYSTEM.
- BASIN B2:** PORTIONS OF LOT 4 (STARBUCKS) 9 AND 5 = 1.2 AC. WILL FREE DISCHARGE 4.8 CFS TO MCMAHON BLVD. BASED ON AN APPROVED LAND TREATMENT RATIO OF 0.15:11:74.
- BASIN B3:** LOT 7A (MCDONALDS) AND A PORTION OF LOT 8 (1.5 ACRES) HAVE BEEN CONSTRUCTED WITH A DETENTION POND LIMITING THE DISCHARGE TO 4.07 CFS.
- BASINS B1+B2+B3 (= 19.1 CFS + 4.8 CFS + 4.07 CFS = 28.0 CFS. THIS LEAVES 41.55-28.0 = 13.55 CFS FOR BASIN B4 ALLOWABLE DISCHARGE.**
- THE REMAINDER OF THE PROPERTY, CONSISTING OF THE REMAINDER OF LOTS 5, 8 AND 9 AND ALL OF LOT 6A = 4.8 ACRES. IF THESE LOTS FOLLOW THE TYPICAL RATIO OF 0.5:10:85, DISCHARGE = 19.8 CFS.**

THEREFORE, THE REQUIRED DETENTION WILL BE 19.8 - 13.88 = 6.25 CFS.

A PORTION OF THE REQUIRED DETENTION WILL BE PROVIDED WITHIN A PROPOSED DETENTION POND WITHIN THE NORTH LANDSCAPING OF LOTS 5 AND 6 (TO BE INCLUDED IN THE UPCOMING LOTS 5 & 6A GRADING & DRAINAGE PLAN SUBMITTAL). ADDITIONAL DETENTION VOLUME WILL BE PROVIDED AS PART OF THE FUTURE DEVELOPMENT OF LOT 9 USING SURFACE AND/OR UNDERGROUND DETENTION. ACTUAL LAND TREATMENTS WILL BE CALCULATED AS EACH LOT DEVELOPS.



MCMAHON MARKETPLACE - OVERALL

PROJECT INFORMATION

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

OFF-SITE: NO OFF-SITE DRAINAGE WILL IMPACT THE MCMAHON MARKETPLACE PROPERTY.

FLOOD HAZARD: MCMAHON MARKETPLACE 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.

FUTURE DEVELOPMENT

THE REMAINING LOTS WILL DEVELOP IN THE FOLLOWING ORDER:

LOT 4 STARBUCKS - (APPROVED FOR CONSTRUCTION) WILL FREE DISCHARGE COMPLETING CONSTRUCTION IN BASINS B1, B2 AND B3. TOTAL DISCHARGE = 28.0 CFS (DEVELOPED) + THE UNDEVELOPED PROPERTY (4.8 ACRE) @ 11.8 CFS FOR A TOTAL DISCHARGE OF 39.8 CFS.

A 1 ACRE PORTION OF LOT 9 SOUTH PAVEMENT (APPROVED FOR CONSTRUCTION) BETWEEN TACO BELL AND FINELAND DRIVE WILL BE CONSTRUCTED TO PROVIDE ACCESS INTO PROPERTY FROM RIO DEL SOLE COURT. THE DEVELOPED DISCHARGE FROM THIS PORTION WILL BE 3.8 CFS. THE REMAINING UNDEVELOPED LOTS (5, 6A, REMAINDER OF LOT 9) WILL GENERATE 9.4 CFS FOR A TOTAL DISCHARGE OF 41.2 CFS.

LOTS 5 & 6A WILL DEVELOP AND WILL PROVIDE DETENTION WITHIN THE OPEN SPACE ADJACENT TO MCMAHON BLVD. TO LIMIT DISCHARGE TO 41.55 CFS.

THE REMAINDER OF LOT 9 WILL BE DEVELOPED IN PHASES WITH ADDITIONAL DETENTION PROVIDED TO ENSURE TOTAL DISCHARGE DOES NOT EXCEED ALLOWABLE.

VICINITY MAP



PROJECT DATA

LEGAL: MCMAHON MARKETPLACE LOTS 4, 5, 6A, 7 AND 9, CITY OF ALBUQUERQUE, NEW MEXICO.

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

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.

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.

FIRST FLUSH RETENTION PONDS WILL BE CONSTRUCTED WITHIN THE INDIVIDUAL LOTS LANDSCAPING AND WITHIN THE LANDSCAPE AREAS ALONG MCMAHON BLVD. STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE PONDS. STORMWATER WILL THEN FREE DISCHARGE (85% LAND TREATMENT 'D') TO MCMAHON BLVD. PUBLIC STORM SEWER.

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.

KEYED NOTES

- NEW COVERED SIDEWALK CULVERT TO PASS FLOW IN EXCESS OF FIRST FLUSH VOLUME.
- EXISTING WATER LINE AND ASSOCIATED EASEMENT THIS AREA TO BE RELOCATED (VERTICAL AND HORIZONTAL) TO ACCOMMODATE UPDATED GRADES & SITE LAYOUT.
- NEW SITE RETAINING WALL TO ACHIEVE GRADE TRANSITIONS SHOWN. MAX. 8' HIGH WALL.
- BUILDING RETAINING/EXTENDED STEMWALLS AS REQUIRED.
- PROPOSED PRIVATE STORM DRAIN.
- NEW INLET TO EXISTING STORM DRAIN MAIN TO ACCEPT ALLOWABLE DISCHARGE.

GENERAL NOTES

- GRADES SHOWN REFLECT OVERALL GRADING SCHEME. ADA PARKING WILL BE COORDINATED WITH ARCHITECT TO BE ADA COMPLIANT. MAX. 2% SLOPE IN ANY DIRECTION.
- LANDSCAPING TO BE DEPRESSED TO HARVEST STORMWATER EXCEPT WITHIN 10' OF A BUILDING OR STRUCTURE.
- CURB OPENINGS WILL BE PROVIDED WHERE POSSIBLE TO ACCEPT STORMWATER INTO DEPRESSED LANDSCAPING.
- ROCK EROSION PROTECTION WILL BE REQUIRED AT CURB OPENINGS, ON SLOPES > 4:1 AND WITHIN SWALES CARRYING CONCENTRATED FLOW (TYPICAL).
- 'FIRST FLUSH' RETENTION PONDING WILL BE PROVIDED WITHIN AVAILABLE LANDSCAPE AREAS THROUGHOUT.
- STEPS AND RAMPS AS REQUIRED TO ACHIEVE GRADE TRANSITIONS WILL BE DESIGNED AS EACH PROPERTY DEVELOPS.

LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED CONTOUR (1' INCREMENT)
- PROPOSED SPOT ELEVATION
- FLOW ARROW
- FINISH FLOOR ELEVATION
- PROPOSED GRADE BREAK

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacoiil.com
2190 CG-101.dwg Jul 18, 2017

MARTIN FM GRUMMER ARCHITECT
331 WILSON PLACE NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-2507

MCMAHON MARKET PLACE
5708 MCMAHON BLVD NW
ALBUQUERQUE, NM 87114
AMENDED DRAINAGE MANAGEMENT PLAN

FRED C. ARFMAN
NEW MEXICO
7322
REGISTERED PROFESSIONAL ENGINEER
07-1577

DATE:
12 JULY 2017
DRAWN BY:
BJB
CHECKED BY:
FCA
VERIFIED BY:

REVISIONS

SHEET NO:
CG1