

# CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

April 11, 2018

David Aube, P.E.  
Hartman & Majewski Design Group  
120 Vassar Dr SE, Suite 100  
Albuquerque, NM, 87106

**RE: Sawmill Market  
Drainage Master Plan  
Engineer's Stamp Date: No Stamp  
Hydrology File: J13D017A**

Dear Mr. Aube:

Based upon the information provided in your submittal received 04/02/2018, the Drainage Master Plan **is not** approved for Building Permit and SO-19 Permit. The following comments need to be addressed for approval of the above referenced project:

1. Please provide an engineer's stamp with a signature and date on sheets.
2. Per the DPM Chapter 22 Section 7, 24"x36" is currently the City's standard. This applies to all site plans, Grading & Drainage Plans, Traffic Circulation Plans, DRC Plans etc.
3. Please insure that the sheet titles are Existing Drainage Master Plan and Proposed Drainage Master Plan.
4. The DPM Chapter 27 Section 2 outlines the minimum text heights. Please insure that the existing grades and proposed grades are L100.
5. Sheet CD1 or Grading Plan. Please add the SO-19 Permit notes. See Attached notes.
6. Sheet CD2. Please correct Section VI. The allowable discharge for the impervious is 0.1 cfs/ac and not 0.01 cfs/ac.

# CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

7. Sheet CD1 & CD2. Please correct the drainage calculations to reflect the allowable discharge for the impervious is 0.1 cfs/ac. The allowable discharge is  $0.1 * 0.596 = 0.06$  cfs.
8. Sheet CD2. Please show the pond volume calculations with both the water surface elevation (100 yr – 6 hr) and the discharge rate.
9. Sheet CD2. Please show how each pond is to restrict the discharge for a total of 0.06 cfs.
10. Sheet CD2. Please show the first flush volume in each pond.
11. Sheet CD2. Please reference City of Albuquerque standard detail No. 2236 – Sidewalk Culvert with Steel Plate Top at the sidewalk culvert.
12. Grading Plan. Please show the flowline elevations of the sidewalk culverts.

PO Box 1293

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Albuquerque

Sincerely,

*Renée C. Brissette*

NM 87103

Renée C. Brissette, P.E. CFM  
Senior Engineer, Hydrology  
Planning Department

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



Timothy M. Keller, Mayor

Private Drainage Facilities within City Right-of-Way  
Notice to Contractor  
(Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

PO Box 1293

Albuquerque

NM 87103

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





# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

**Project Title:** \_\_\_\_\_ **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_

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

**Legal Description:** \_\_\_\_\_

**City Address:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

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

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

**Other Contact:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

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

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

Check all that Apply:

**DEPARTMENT:**

\_\_\_\_ HYDROLOGY/ DRAINAGE  
\_\_\_\_ TRAFFIC/ TRANSPORTATION

**TYPE OF SUBMITTAL:**

\_\_\_\_ ENGINEER/ARCHITECT CERTIFICATION

\_\_\_\_ CONCEPTUAL G & D PLAN

\_\_\_\_ GRADING PLAN

\_\_\_\_ DRAINAGE MASTER PLAN

\_\_\_\_ DRAINAGE REPORT

\_\_\_\_ 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

\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_

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

**DATE SUBMITTED:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF:

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

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



SAWMILL MARKET, PHASE 1

PURPOSE AND SCOPE

The purpose of this drainage plan is to present the existing and proposed drainage management plans for the proposed Sawmill Market facility located at the NE Corner of Bellamah Avenue NW and 19th Street NW. The site is located in Zone Atlas Page H-13-22. The site is currently fully developed and was the former site for Paxon Lumber.

**SITE DESCRIPTION AND HISTORY**

The site has been previously developed with a large warehouse for Paxon Lumber. The building is currently vacant, but surrounding asphalt pavement is still in good condition.

COMPUTATIONAL PROCEDURES

Hydrologic analysis was performed utilizing the design criteria found in the COA-PPM Section 22.2 released in June 1997.

PRECIPITATION

The 100-yr, 6-hr duration storm was used as the design storm for this analysis. This site is within Zone 2, as identified in the DPM Section 22.2. All areas within the site were used to calculate the peak discharge within precipitation, excess precipitation and peak discharge.

EXISTING DRAINAGE CONDITIONS OVERVIEW

The existing site is divided into two drainage basins. One basin drains toward the south into Bellamah Avenue NW. The basin contains 1/2 of the roof area as well as the parking and drive lanes on the southern parts of the site. This basin identified in the plan as EX1 contains 56,530sf and generates a peak runoff rate of 5.94cfs between the multiple driveways along the southern edge. For the purpose of this report, we have used the discharge into Bellamah as an Analysis Point even though it is discharge through multiple driveways.

The second basin contains the north 1/2 of the building foot print, as well as parking areas and drive lanes. This basin identified in the plan as EX2 contains 56,530sf and discharges into the old Roll-off corner. Basin EX2 contains a total of 74,545sf and generates a peak discharge of 7.84cfs.

Currently there are no on-site ponding areas to reduce the excess storm runoff. The Northwest corner of the site contains a mound of soil that will be removed during the construction activities proposed by this project.

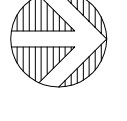
Per FEMA, the site is in a Zone X (recurrence period of 500 years). Areas to the north and south have defined flooding depths, but those defined AH Zones to not touch the subject property.



FEMA FLOOD MAP  
SCALE: NOT TO SCALE



ZONE ATLAS PAGE  
SCALE: NOT TO SCALE



ERIC HASKINS, ARCHITECT

HERITAGE HOTELS & RESORTS  
201 THIRD STREET NW  
SUITE 1140  
ALBUQUERQUE, NM 87102  
505-212-9148



SAWMILL MARKET, PHASE 1  
SITE, SHELL, COMMON AREAS

1909 BELLAMAH AVENUE NW  
ALBUQUERQUE, NEW MEXICO

Date 4-2-2018

Revised

Drawn by DAA  
Checked by DAA

Scale 1"=30'  
Sheet Title EXISTING DRAINAGE PLAN

Job Number 1419

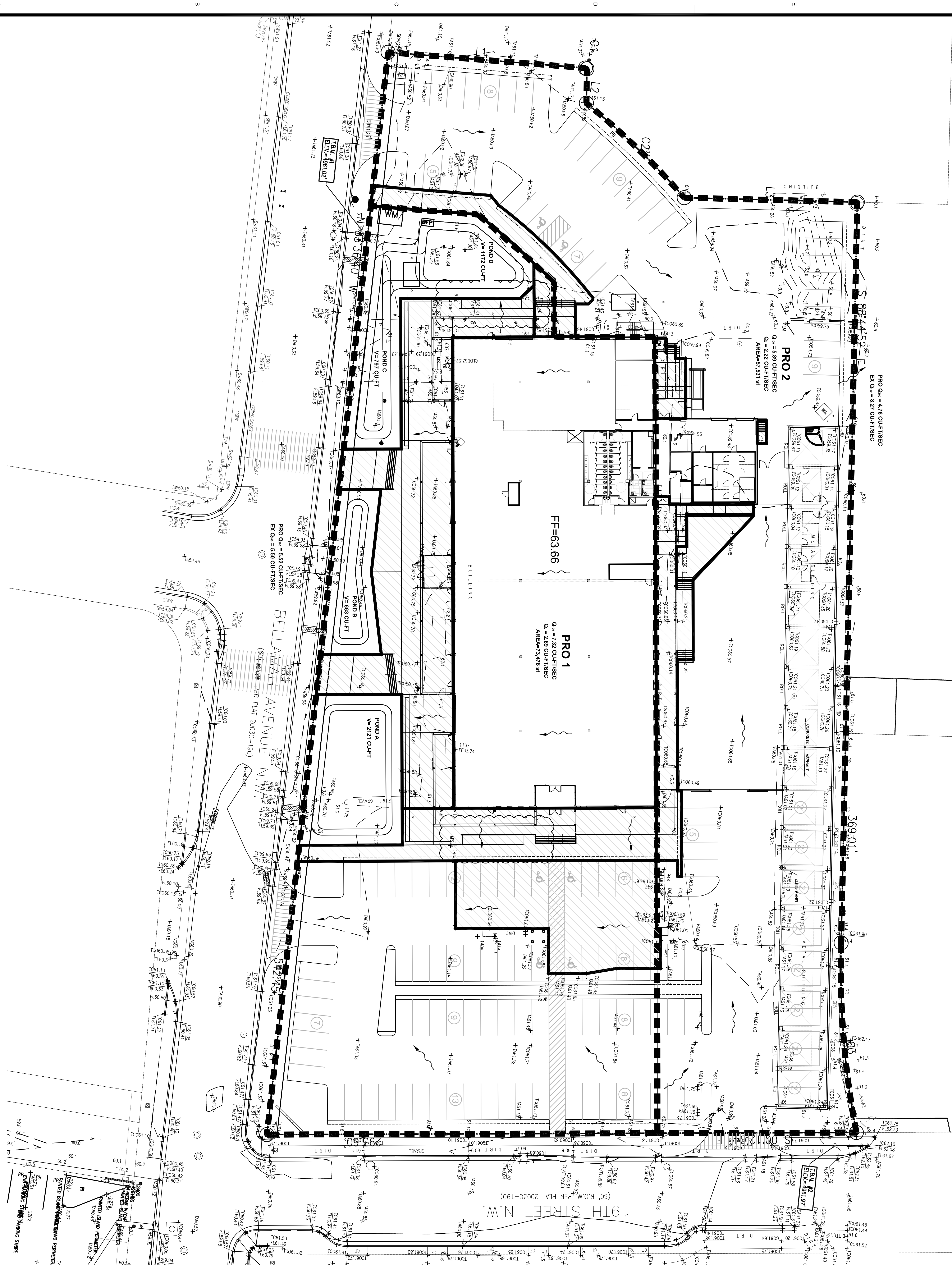
CD1

Sheet No.



TRACT 1, LANDS OF  
ACCION NEW MEXICO  
(FILED 09-16-2009, 2009C-143)

TRACT 2, LANDS OF  
ACCION NEW MEXICO  
(FILED 09-16-2009, 2009C-143)



NORTH  
A1  
PROPOSED DRAINAGE PLAN  
1"=20'-0"

VII. DRAINAGE MANAGEMENT PLAN (CONTINUED)

The site overall drainage patterns will change slightly with the reconstruction. The main difference being created by modifying the roof of the buildings to slope entirely to the south side. Formerly the roof was generally flat and sloped both north and south from the middle. A new build up roof framing will be added to create the 1/4" per foot slope and allow for the addition of roof insulation to meet current Energy Codes.

The Plan also shows areas where the existing building, asphalt, and/or concrete will be removed and replaced with new impervious surfaces. The total area that will be demolished down to the surface of the soil and rebuilt as an impervious surface is 25,967 sq ft and will generate an Excess Runoff Volume of 4,588 cubic feet. The first flush volume from this same area will generate 736 cubic feet. At a pre-design conference we will hold that new impervious surfaces will need to be retained on site with the runoff restricted to 0.01 cfs per acre. This distinction is important as we are not required full retention from these areas, that would require the 100 year 10 day volume.

In addition to the restricted runoff, the concept of offsetting the volumes from one area to compensate for another was discussed. It was requested that we be permitted to harvest the runoff from the roof and patio/terrace in exchange for the parking lot surfaces. The roof will be sloped toward the south, and internal roof drains will be added to collect and convey the runoff to the detention/retention ponds. The ponds will be sized to retain the 4588 cft of excess runoff and allow the remainder to overflow and discharge toward Bellamah.

The roof of the building will generate a peak runoff rate of 2.55 cfs and an excess runoff volume of 4,182cft. A portion of the terrace will also drain into the ponds. When combined with the roof will achieve a peak runoff rate of 2.80 cfs and an excess runoff volume of 4,588cft. This means that approximately 0.25 cfs will be allowed to overflow the ponding volume and discharge into Bellamah during the 100 year 6 hour event. Three sidewalk culverts will be constructed along Bellamah Avenue NW to allow the excess runoff beyond the 4,588cft to flow out into the public street and to the existing catch basin located on the north side of the roadway at 20th Street NW.

Basin Pro 1 all together will generate a peak runoff rate of 7.32cfs, with 2.80cfs being retained in the ponding areas. This gets the overall discharge rate into Bellamah down to 5.52cfs that is 42cfs less than the historic rate of 5.94cfs. Small tree wells and shallow landscaping depressions have not been included in this study as they are typically overlooked during a 100 year rainfall event. These small areas may have the capacity and will further decrease the excess runoff, but the downstream storm drainage systems would already benefit from the 0.42cfs decrease in excess runoff.

The north side of the building (Pro 2) will have a reduction in excess runoff and peak flow rate as the roof of the building is not all sloping south. The peak flow rate for Pro2 will be 5.89cfs (as opposed to 7.84cfs in the existing conditions). The discharge point for Basin Pro 2 will match the historic condition existing (actively removed and reconstructed impervious surfaces) in this basin will be retained on the south side of the facility within Basin Pro 1 as part of the offsetting the volumes logic described above.

This north basin will reduce the excess runoff by 1.97cfs to the downstream drainage systems. This reduction when combined with the Pro 1 reduction of 0.42cfs will yield an overall reduction in excess runoff of 2.39cfs.

VII. CONCLUSIONS

This project has been designed to minimize the removal and replacement of impervious surfaces. Based on the pre-design conference, ponding areas have been sized to retain both the first flush and excess runoff from the new impervious surfaces. The ponding is located on the south side of the building and will catch roof runoff and patio/terrace runoff to offset other impervious surfaces located around the site. The peak runoff into Bellamah will be decreased by 0.42 cfs while the discharge at the north-west corner is reduced by 1.97cfs, giving a net reduction in peak discharge of 2.39cfs. Ponding areas have been set to contain the first flush volume and up to the 60 year 6 hour surface runoff volume. The excess runoff from the catch basins will be constructed to convey the excess beyond the retained volume of 4,588cft into Bellamah.

The peak discharge has been reduced, runoff from new surfaces are retained on site, excess runoff is restricted to 0.01cfs per acre for the new impervious surfaces.



NORTH  
SCALE NOT TO SCALE H:1:3Z  
ZONE ATLAS PAGE

ERIC HASKINS, ARCHITECT  
HERITAGE HOTELS & RESORTS  
201 THIRD STREET NW  
SUITE 1140  
ALBUQUERQUE, NM 87102  
505-212-9148



SAWMILL MARKET, PHASE 1  
SITE, SHELL, COMMON AREAS  
1909 BELLAMAH AVENUE NW  
ALBUQUERQUE, NEW MEXICO

Date	4-2-2018
Revised	
Drawn by	DAA
Checked by	DAA
Scale	1"=20'
Sheet Title	PROPOSED DRAINAGE PLAN
Job Number	1419
Sheet No.	

CD2