

# CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

January 16, 2018

Craig Hagelgantz, P.E.  
ABQ Engineering Inc.  
8102 Menaul Blvd NE, Suite D  
Albuquerque, NM, 87120

**RE: All-Rite Construction Warehouse  
Grading and Drainage Plan  
Stamp Date: 12/19/17  
Hydrology File: K09D042**

Dear Mr. Hagelgantz:

PO Box 1293

Based upon the information provided in your resubmittal received 01/16/2018, the Grading Plan is approved for Building Permit, SO-19 Permit, and for action by the DRB on the Site Plan for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

NM 87103

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

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

Sincerely,

*Renée C. Brissette*

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

12/19/17

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

**RE: All-Rite Construction Warehouse  
Grading and Drainage Plan Stamp  
Date: 12/09/17  
Hydrology File: K09D042**

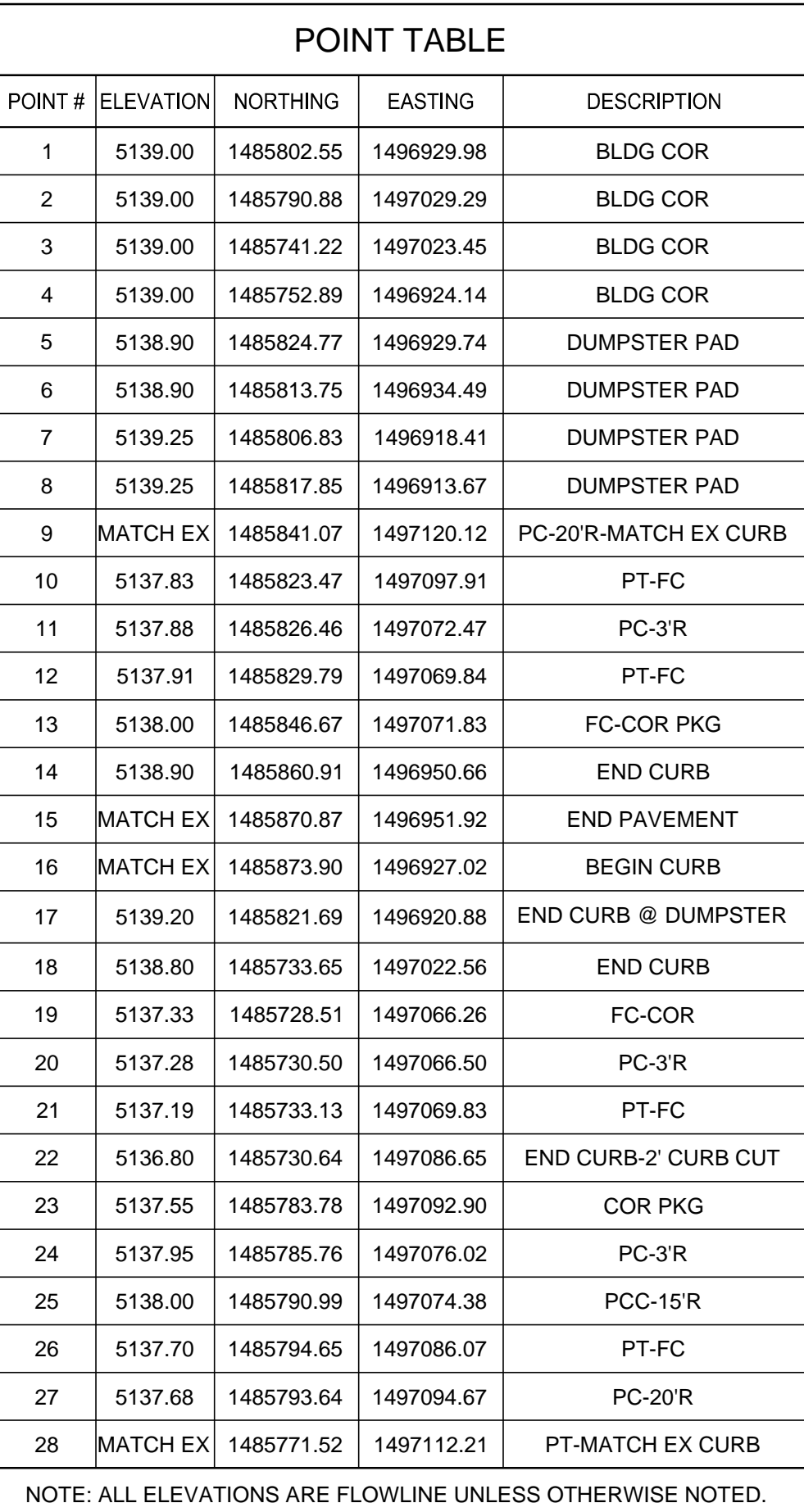
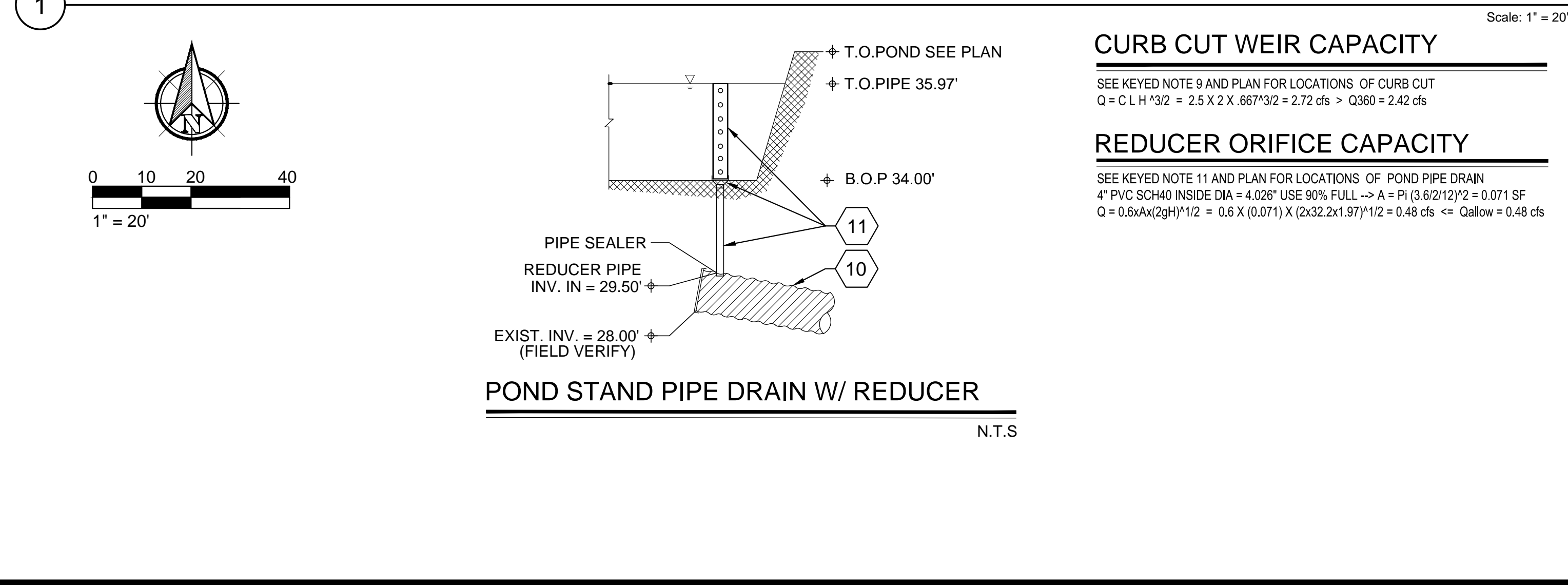
The following is a response to your hydrology comments on the submittal plans. The item numbers below refer to your comments:

1. Effective date has been added to the FIRM information. Refer to sheet C-101 dated 12/19/17.
2. Water block per COA Paving Detail No. 2426 at the driveway has been updated on grading plan. Refer to sheet C-101 dated 12/19/17.
3. First flush drainage has been routed through the first flush ponding area and will be discharged into existing storm drainage system in Oliver Ross Drive. Refer to sheet C-101.
4. Offsite discharge has been limited to 0.48cfs per master drainage plan. Refer to keyed note #11 on sheet C-101 dated 12/19/17.
5. Offsite discharge has been limited to 0.48cfs per master drainage plan and will discharge into the existing 18" CMP stub out per master plan. Refer to keyed note #11 on sheet C-101 dated 12/19/17.

Please contact me if there's additional information we need to provide.

Sincerely,  
Craig Hagelgantz PE  
ABQ Engineering Inc.





**DRAINAGE NARRATIVE**

THIS SITE IS LOCATED ON THE WEST SIDE OF OLIVER ROSS DRIVE NORTH WEST, AND IS LOT 8 WITH IN BLOCK 3 OF THE CLIFFORD WEST BUSINESS PARK IN ALBUQUERQUE, NM AND CONTAINS APPROXIMATELY 0.592 ACRES. THIS SITE IS LOCATED ON FIRM MAP NO. 35002, PANEL 0328J EFFECTIVE DATE 11/04/17 WHICH INDICATES THE ENTIRE SITE IS LOCATED IN ZONE X, AND THAT NO PORTION OF THE SITE IS LOCATED WITHIN A 100 YEAR FLOOD PLAIN.

THE PRE DEVELOPED SITE IS A VACANT LOT. THE UNDEVELOPED DRAINAGE PATTERN IS SHEET FLOW DIRECTED TOWARD THE SOUTH EAST CORNER TO THE LOT AND ONTO OLIVER ROSS DRIVE AND THEN DOWN THE STREET TO THE SOUTH AND INTO AN EXISTING STORM DRAIN SYSTEM AT THE INTERSECTION OF OLIVER ROSS DRIVE NW AND BLUEWATER ROAD NW.

THE SCOPE OF THIS DEVELOPMENT IS, AN ASPHALT PARKING LOT, PROPOSED BUILDING, AND SIDEWALKS WILL BE ADDED TO THE SITE AS SHOWN ON PLAN. THE DIRECTION AND DESTINATION OF THE HISTORIC DRAINAGE PATTERNS WILL BE PRESERVED. THE ADDITION OF AN ONSITE RETENTION PONDING TO CAPTURE AND RETAIN THE "FIRST FLUSH" RUNOFF PER COA DRAINAGE ORDINANCE WILL BE LOCATED IN THE AREAS WEST OF THE PROPOSED BUILDING, THE REMAINING VOLUME FROM THE 90TH PERCENTILE STORM EVENT (100 YEAR, 10 DAY) WILL MAINTAIN HISTORIC DRAINAGE PATTERNS AND AS DESCRIBED ABOVE IN THE PRE DEVELOPED CONDITIONS (SEE CALCULATIONS). DUE TO THE DEVELOPED CONDITIONS, WITH THE FIRST FLUSH RETAINING POND AND SIDEWALK DRAINAGE OUTLET ONTO OLIVER ROSS DRIVE, THE DEVELOPED OFFSITE DISCHARGE RATE IS WITHIN THE ALLOWABLE DEVELOPED OFFSITE FLOW RATE (0.48 CFS) AS DESCRIBED IN THE DRAINAGE MASTER PLAN FOR CLIFFORD WEST BUSINESS PARK DATED 9/12/97 (COA #K-9/D23).

**ON-SITE DRAINAGE RETENTION**

# DRAINAGE CALCULATIONS

<b>Hydrology Calculations</b>				
DPM - Volume 2, October 2008 Section 22.2.Hydrology				
Precipitation Zone	<b>1</b>			
100 year-6hr Depth, P (360)	<b>2.20</b>			
100 year-24hr Depth, P (1440)	<b>2.66</b>			
Treatment Area	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Excess Precipitation Factors	<b>0.44</b>	<b>0.67</b>	<b>0.99</b>	<b>1.97</b>
Peak Discharge Factors	<b>1.29</b>	<b>2.03</b>	<b>2.87</b>	<b>4.37</b>
Land Treatment Area	Acres	Existing	Allowable	Proposed
Type "D" (Impervious, Roof, Drive way, Ect.)		<b>0.000</b>		<b>0.445</b>
Type "C" (Compacted Soil,Unpaved Parking)		<b>0.592</b>		<b>0.000</b>
Type "B" (Landscape Areas)		<b>0.000</b>		<b>0.147</b>
Type "A" (Undeveloped)		<b>0.000</b>		<b>0.000</b>
Total (Acres)		0.592		0.592
Excess Precipitation E (in)		0.99		1.65
Volume (360), acre-ft		0.049		0.081
Volume (1440), acre-ft		0.066		0.098
Q (360), cfs		1.698	0.480	2.242
Q (1440), cfs		1.579		2.085