

**LEGEND:**

- 38.00 FG PROPOSED SPOT ELEVATIONS (FINISHED GRADE)
- MATCH (85.19) MATCH EXISTING ELEVATIONS
- TC ON TOP OF CONCRETE
- FL FLOW LINE, CURB
- INV INVERT
- FG FINISH GRADE
- TBC TOP OF BASE COURSE
- TC TOP OF CURB
- TG TOP OF GRATE
- Flow Arrow FLOW ARROW
- ==== GRADE BREAK—HIGH POINT
- SWALE
- SD STORM DRAIN LINE
- 5895 — PROPOSED MAJOR CONTOUR
- — — PROPOSED MINOR CONTOUR
- 5895 --- EXISTING MAJOR CONTOUR
- --- EXISTING MINOR CONTOUR
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- SAS — SANITARY SEWER LINE
- SD — STORM DRAIN LINE
- STORM DRAIN INLET
- POWER POLE
- GUY WIRE
- OHW — OVERHEAD WIRES
- SEWER — SEWER
- E — UNDERGROUND ELECTRIC LINE
- COM — UNDERGROUND COMMUNICATIONS LINE
- G — UNDERGROUND GAS LINE
- W — UNDERGROUND WATER LINE
- SANITARY SEWER CLEAN-OUT
- WATER METER
- WATER VALVE
- HYDRANT
- X — X — FENCE

**GRADING AND DRAINAGE NARRATIVE**

THE EXISTING PROPERTY FOR COMMERCIAL DEVELOPMENT IS LOCATED AT 3615 ALAMEDA BLVD. NW (HWY. 528). THE SITE IS ACCESSED FROM THE NORTH SIDE (EXISTING DEVELOPMENT) FROM NORTH BAR RANCH NW AND THE WEST SIDE FROM ALAMEDA BLVD. NW. AND FROM THE EAST SIDE COMMERCIAL DEVELOPMENT. THE SITE CONSISTS OF AN EXISTING PARKING LOT, BUILDING AND CONCRETE FLATWORK. THERE IS AN EXISTING DEVELOPMENT (SEVEN BAR RANCH) ON THE NORTH AND SOUTH SIDE. THE PROPERTY IS BOUNDED BY ALAMEDA BLVD (NM-528) ON THE WESTSIDE. TO THE EAST IS A VACANT COMMERCIAL LOT. THE LAND IS GENERALLY FLAT AND SLOPES FROM THE SOUTHWEST TO THE NORTHEAST. THE POSSIBLE IMPROVEMENTS WILL BE NEW BUILDINGS AND ASSOCIATED CONCRETE FLATWORK, ASPHALT PARKING LOT, CURB AND GUTTERS AND ASSOCIATED SITE WORK.

THE PROPOSED GRADING IMPROVEMENTS WILL INCLUDE STANDARD CURB AND GUTTER, VALLEY GUTTERS, CURB CUTS AND RUNDOWNS ALLOWING STORMWATER INTO PROPOSED WATER HARVESTING AREAS. THIS WATER HARVESTING AREAS WILL BE USED TO MANAGE THE 90TH PERCENTILE STORM EVENTS (REQD VOL = (0.33 in. \* 65900 SF)/12 = 1850 CF. THE PROPOSED WATER HARVEST AREA VOL OF 2500 CF IS GREATER THAN 1850 CF, AS REQUIRED BY THE RECENT CITY OF ALBUQUERQUE DRAINAGE ORDINANCE CHANGES. ALL ROOF DRAINAGE AND PROPOSED ASPHALT PARKING AREAS WILL DISCHARGE INTO WATER HARVEST AREAS IN THE NORTH AND NORTHEAST CORNER OF THE SITE OR WATER QUALITY INLETS AT THE SOUTH END OF THE SITE.

WHEN THE SITE IS FULLY DEVELOPED AS PROPOSED ON THIS CONCEPTUAL G & D PLAN, THERE WILL BE A SLIGHT DECREASE IN RUNOFF FROM THAT OF EXISTING CONDITIONS. THE HYDROLOGY TABLE INDICATES THAT THE IMPERVIOUS AREA WILL DECREASE BY APPROXIMATELY 1700 SF RESULTING IN A DECREASE IN VOLUMETRIC RUNOFF OF 130 CUBIC FEET. THE HYDROLOGY RESULTS INDICATE THAT THE PEAK FLOW RATE WILL REMAIN UNCHANGED.

THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A FEMA DESIGNATED FLOOD ZONE AS PER FEMA MAPS.

**KEYED NOTES:**

- 1) NEW HOT MIX ASPHALT.
- 2) APPROXIMATE LOCATION OF PROPERTY LINE.
- 3) NEW WATER QUALITY INLET.
- 4) NEW 12" STORM DRAIN PIPE.
- 5) CONNECT TO EXISTING STORM DRAIN INLET.
- 6) NEW WATER HARVEST AREA.
- 7) CONCRETE VALLEY GUTTER SWALE.
- 8) NEW BUILDING.
- 9) EXISTING ASPHALT.
- 10) SAW CUT EXISTING ASPHALT, MATCH EXISTING ELEVATION. SEE PLAN FOR ELEVATION.
- 11) RIP RAP RUNDOWN.
- 12) NEW 12" STORM DRAIN OVERFLOW PIPE.

**DRAINAGE CALCULATIONS**

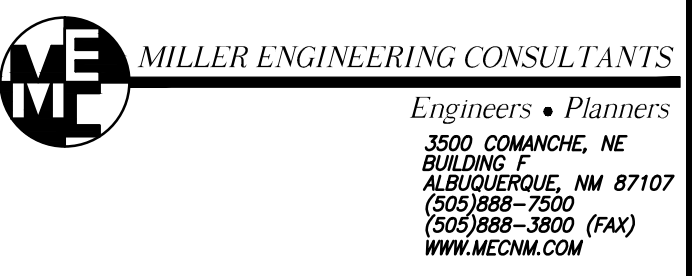
Precipitation Zone 1 - 100-year Storm P(360) = 2.20 in P(1440) = 2.66 in

Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)
		A	B	C	D				
Existing Conditions									
A	1.84	0.00	0.07	0.42	1.35	1.70	0.260	0.312	7.25
<b>Total</b>	<b>1.84</b>								<b>7.25</b>
Proposed Conditions									
A	1.84	0.00	0.00	0.53	1.31	1.69	0.259	0.309	7.25
<b>Total</b>	<b>1.84</b>								<b>7.25</b>

Precipitation Zone 1 - 10-year Storm P(360) = 1.47 in P(1440) = 1.78 in

Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(10-6) (af)	V(10-24) (af)	Q(10) (cfs)
		A	B	C	D				
Existing Conditions									
A	1.84	0.00	0.07	0.42	1.35	1.02	0.156	0.191	4.58
<b>Total</b>	<b>1.84</b>								<b>4.58</b>
Proposed Conditions									
A	1.84	0.00	0.00	0.53	1.31	1.01	0.155	0.188	4.58
<b>Total</b>	<b>1.84</b>								<b>4.58</b>

CONSULTANT:



OWNER:

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01/31/17 ENGINEERING COMMENTS

ISSUE: PERMIT SET

**COMMERCIAL REDEVELOPMENT**  
3615 NM HWY 528  
Albuquerque, NM

DATE: 01/31/17

SHEET TITLE:  
EPC CONCEPTUAL GRADING AND DRAINAGE PLAN FOR SUBDIVISION

C-101

