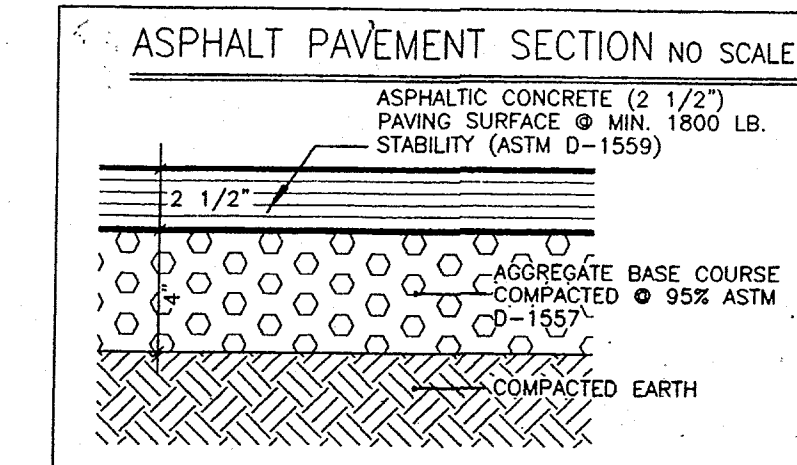


LEGAL DESCRIPTION:

NLY 125 FT OF PARCEL A-1 PLAT FOR JOSEPH DEAY TR
PARCELS A-1, A-2, C-1 & C-2 CONT 0.7300 AC M/L OR 32,990 SQ FT M/L
UPC CODE: 101605649725241724
717 ACRES
ZONED C-2

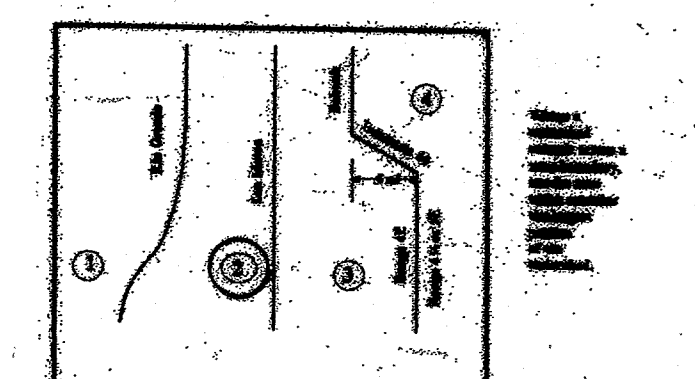


A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

ZONE	LOCATION
1	West of the Rio Grande
2	Between the Rio Grande and Rio Mateo
3	Between Rio Mateo and Rioabak, Mouth of Interoceanic 40; and between San Mateo and the East boundary of Range 4 East, South of Interoceanic 40
4	East of Rioabak, Mouth of Interoceanic 40; and East of the East boundary of Range 4 East, South of Interoceanic 40

Time	Intensity	100-YR (2-YR, 10-YR)
1	3.70 (1.84, 3.34)	
2	5.05 (2.04, 3.41)	
3	5.38 (2.21, 3.65)	
4	5.61 (2.34, 3.83)	



Drainage Comments:

As shown on the Vicinity Map herein, the subject site is located near the Southwest corner of Menaul Blvd. N.E. and Carlisle Blvd. N.E., in the City of Albuquerque, Bernalillo County, New Mexico, (Zone Atlas Map "H-16-Z").

The subject site 1.) is presently an undeveloped vacant lot, the proposed plan as shown, hereon is to construct a retail facility and associated improvements thereon, 2.) does not contribute flows to adjacent properties, 3.) does not accept flows from adjacent properties, 4.) is not located within a designated floodplain, (reference F.E.M.A. Firm Panel 351 of 825), 5.) is allowed free discharge of developed flows into the adjacent street right-of-way.

Drainage Calculations

Per Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, Bernalillo County, New Mexico.

[Site Area: 0.71 acres]

Precipitation Zone: Two (2)

Peak Intensity: In./Hr. at Tc = Twelve (12) Minutes. (100-Yr. / 6 Hr.) = 5.05

EXCESS PRECIPITATION:		PEAK DISCHARGE:
TREATMENT A	0.53 in.	1.56 cfs/ac.
TREATMENT B	0.78 in.	2.28 cfs/ac.
TREATMENT C	1.13 in.	3.14 cfs/ac.
TREATMENT D	2.12 in.	4.70 cfs/ac.

EXISTING CONDITIONS

	AREA	AREA
TREATMENT A	0.00 ac.	0.00 ac.
TREATMENT B	0.00 ac.	0.00 ac.
TREATMENT C	0.63 ac.	0.07 ac.
TREATMENT D	0.88 ac.	0.64 ac.

EXISTING EXCESS PRECIPITATION:

$$\begin{aligned} \text{Weighted E} &= (0.53) \times (0.00) + (0.78) \times (0.00) + (1.13) \times (0.63) + (2.12) \times (0.08) / 0.71 \\ &= 1.24 \text{ in} \\ V100-360 &= (1.24) \times (0.71) / 12 = 0.07337 \text{ ac-ft} = 3,196.0 \text{ cf} \end{aligned}$$

EXISTING PEAK DISCHARGE:

$$Q_{100} = (1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.63) + (4.70) \times (0.08) = 2.36 \text{ cfs}$$

PROPOSED EXCESS PRECIPITATION:

$$\begin{aligned} \text{Weighted E} &= (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.07)+(2.12)x(0.64)/0.71 \\ &= 2.03 \text{ in} \\ \text{V100-360} &= (2.03)x(0.71)/ 12.0 = 0.12011 \text{ ac-ft} = 5,232.0 \text{ cf} \end{aligned}$$
$$V_{100-1440} = (0.12) + (0.71) \times (2.75 - 2.35) / 12 = 0.143667 \text{ ac-ft} = 6,258.1 \text{ cf}$$

$$V_{100-10\text{day}} = (0.12) + (0.71) \times (3.95 - 2.35) / 12 = 0.214667 \text{ ac-ft} = 9,350.9 \text{ cf}$$

PROPOSED PEAK DISCHARGE:

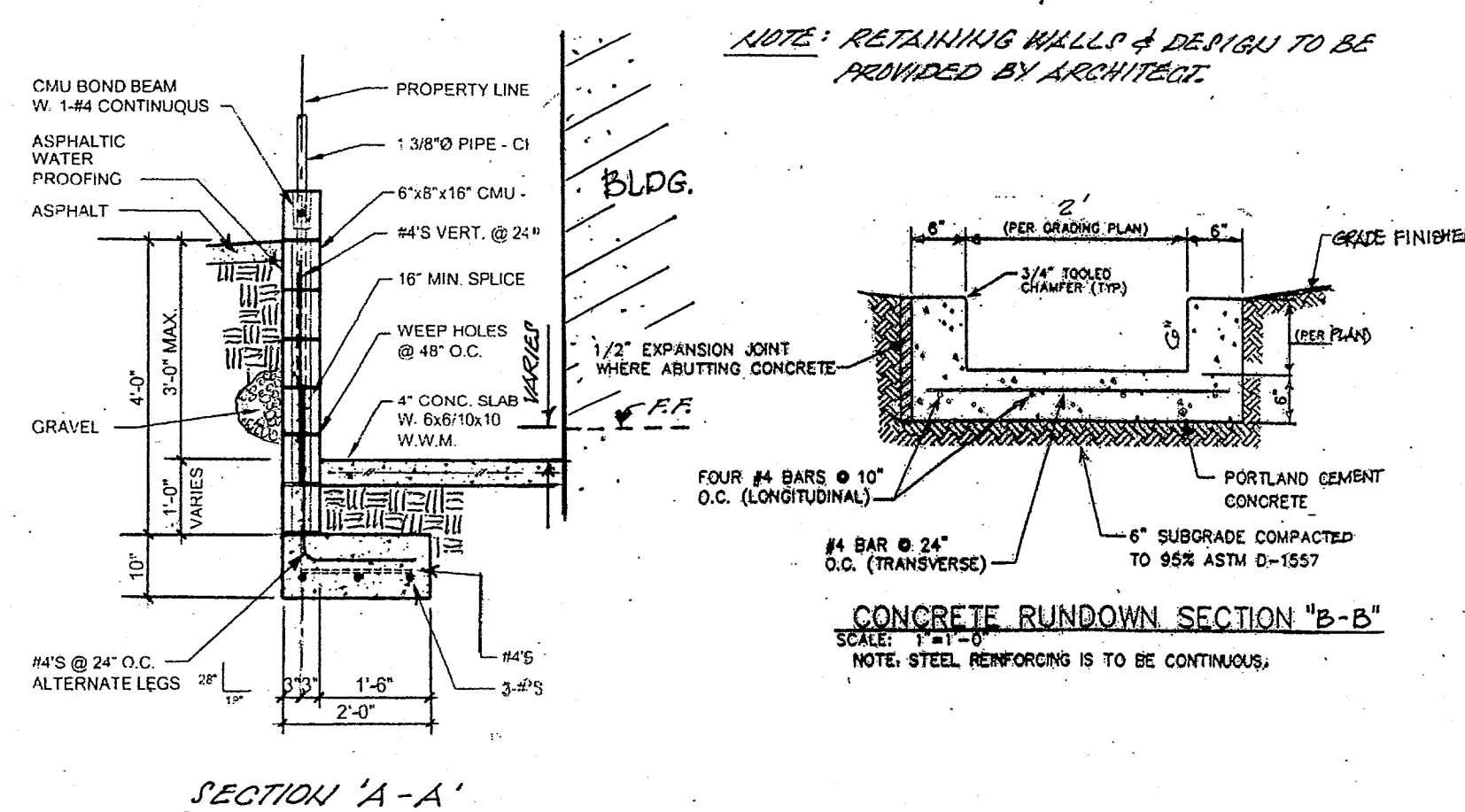
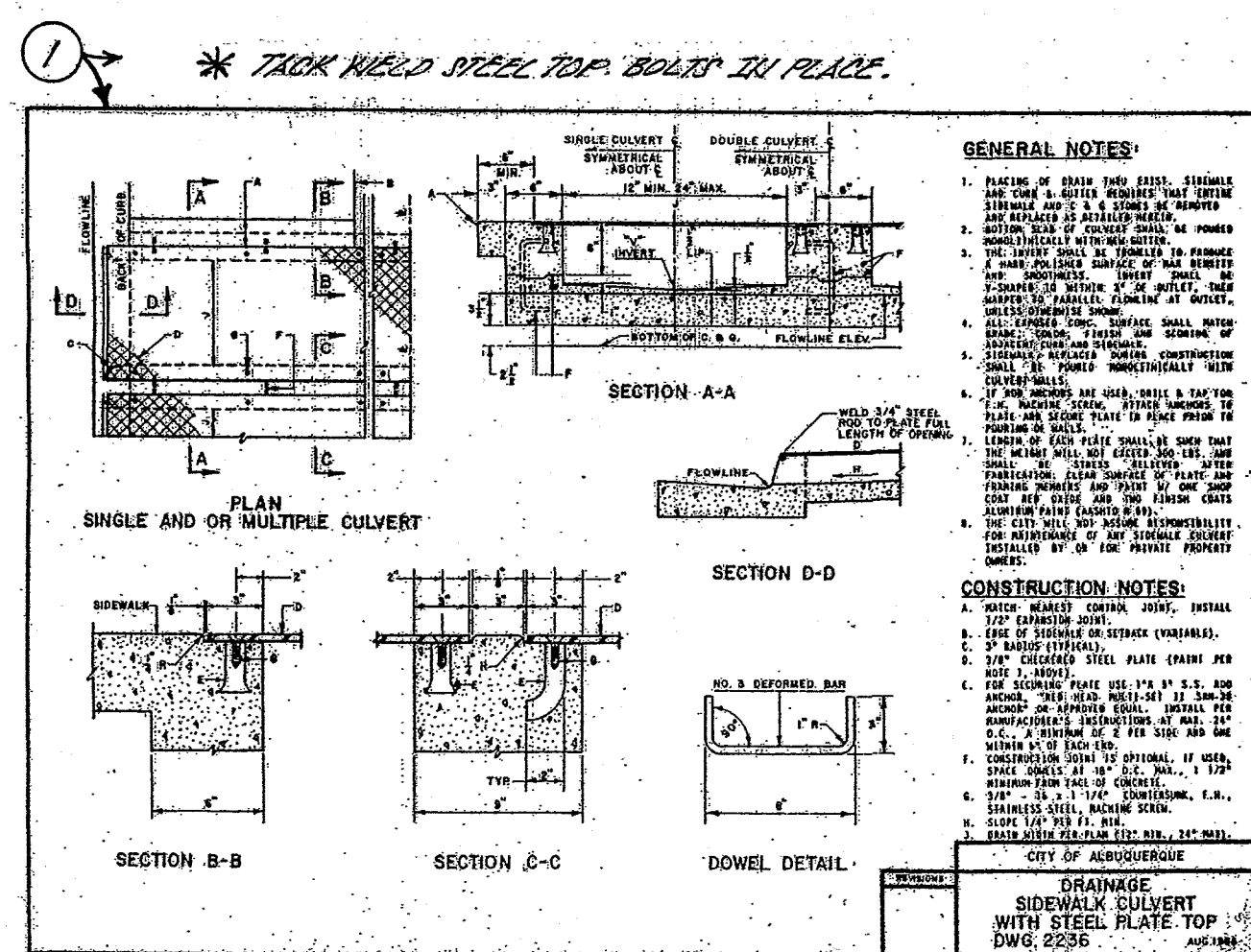
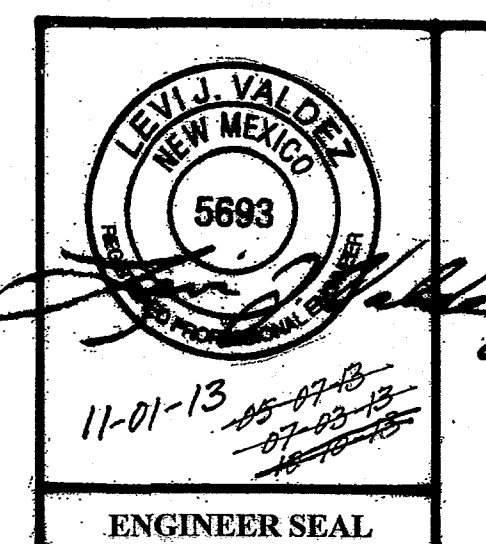
$$Q_{100} = (1.56) \times (0.00) + (2.28) \times (0.00) + (3.14) \times (0.07) + (4.70) \times (0.64) = 3.23 \text{ cfs}$$

INCREASE:

$V-100 = 5,232.0 - 3,196.0 = 2,036.0 \text{ c.f.}$

$2.22 \text{ c.f.} - 2.26 \text{ c.f.} = -0.04 \text{ c.f.}$

A PROPOSED PLAN
FOR
CROWN PLAZA
(NAUL AND CARLISLE BLVD. N.E.)
ALBUQUERQUE, NEW MEXICO
FEBRUARY, 2013



NOTE: RETAINING WALLS & DESIGN TO BE PROVIDED BY ARCHITECT.

NOTES:

- ① - PROVIDE 24" DRAINAGE SIDEWALK CULVERT.
- ② - PROVIDE 30" WIDE CURB OPENING PER C.O.A. STD. DWG. #2426
- ③ - DEPRESS LANDSCAPE AREA 6" TO 12" WHERE POSSIBLE.

GRADING AND DRAINAGE PLAN