

CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

January 4, 2018

Mark Goodwin, P.E.
Mark Goodwin & Associates
PO Box 90606
Albuquerque, NM, 87199

**RE: Bosque Plaza – Guardian Storage
Conceptual Grading and Drainage Plan
Stamp Date: 01/03/17
Hydrology File: E12D006E**

Dear Mr. Goodwin:

PO Box 1293 Based upon the information provided in your resubmittal received 01/04/2018, the
Conceptual Grading and Drainage Plan is approved for action by the DRB on the Site Plan
for Building Permit.

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

Sincerely,

NM 87103 *Renée C. Brissette*

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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

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)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

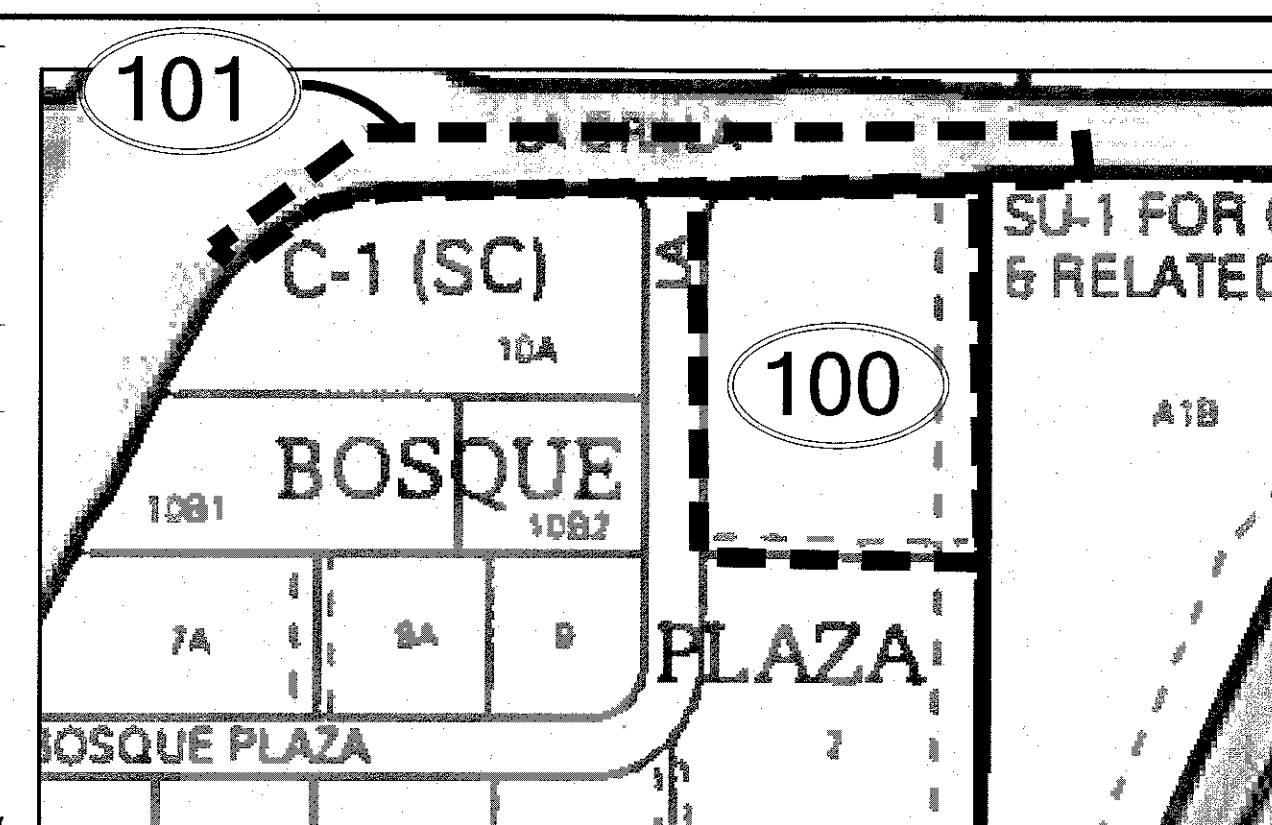
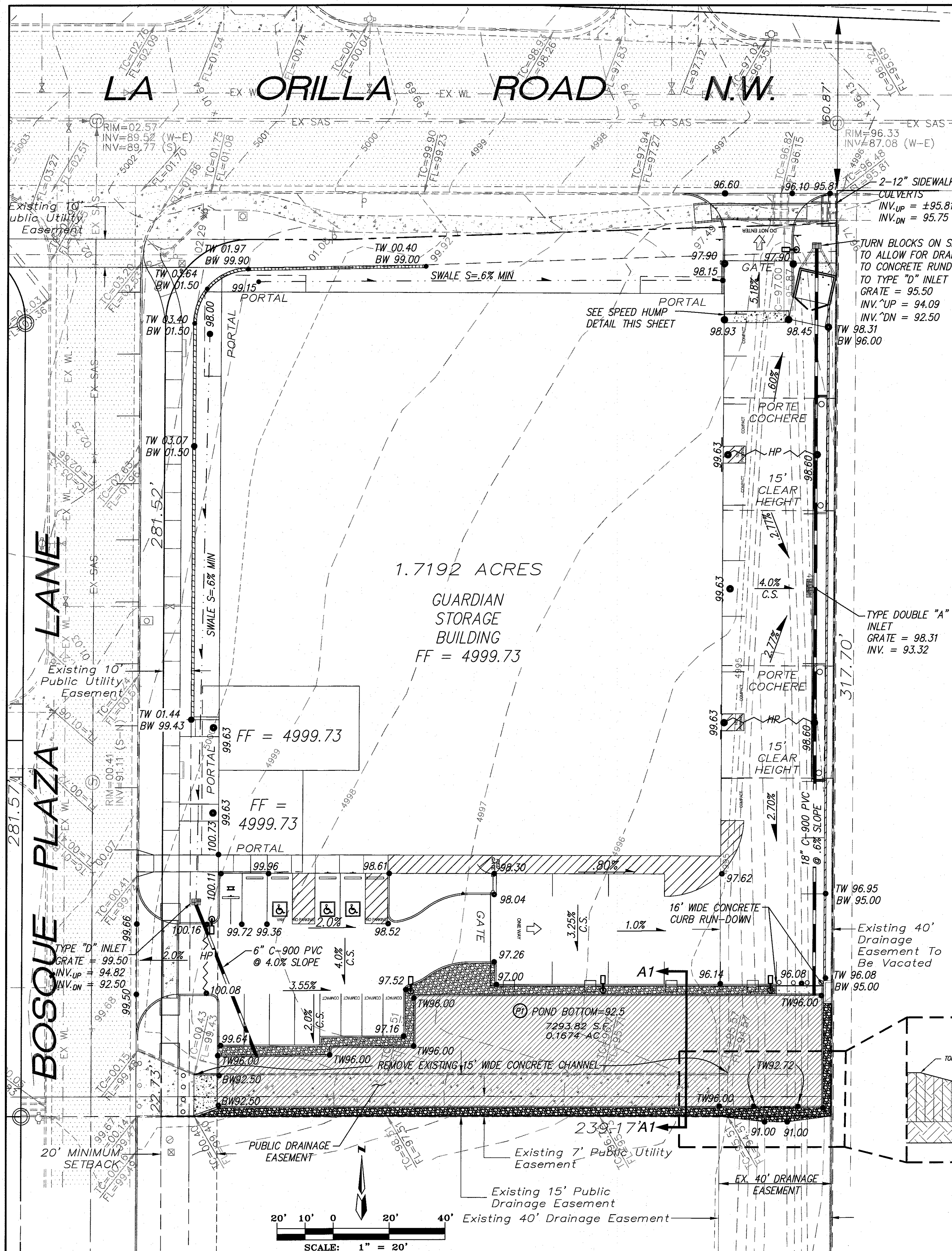
CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ 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
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____



HYDROLOGY NOTES

THE PROJECT SITE IS BOUNDED BY BOSQUE PLAZA LANE TO THE WEST, LA ORILLA ROAD TO THE NORTH, A DEVELOPED LOT TO THE EAST AND A CONCRETE DRAINAGE CHANNEL TO THE SOUTH. A 2-STORY STORAGE FACILITY IS BEING PROPOSED TO BE CONSTRUCTED ON THE 1.72 ACRE LOT. IT WILL HAVE TWO ACCESS ENTRANCE ROADS; ONE ON THE NORTH AND ONE ON THE WEST SIDE OF THE PROPERTY.

THIS SITE IS PART OF THE MASTER DRAINAGE PLAN FOR BOSQUE PLAZA (BY TERRA WEST STAMPED 9/25/2002). LOT 1 IS SUBJECT TO ALL RESTRICTIONS, CONDITIONS, AND REQUIREMENTS AS SET FORTH IN "BOSQUE PLAZA DECLARATION OF EASEMENTS, COVENANTS, AND RESTRICTIONS," FILED IN THE OFFICE OF BERNALILLO COUNTY, NEW MEXICO ON THE 28TH DAY OF JULY, 2004 IN BOOK A81, PAGE 5448.

THE SITE IS NOT LOCATED IN A 100YR FLOOD ZONE PER FEMA FIRM MAP 35001C01166, SEPTEMBER 26, 2008.

EXISTING CONDITIONS: THE FLOW PATTERN FOR THIS AREA IS IN A GENERAL EAST TO SOUTHEAST DIRECTION. THE EXISTING CHANNEL ALONG THE SOUTH PROPERTY BOUNDARY WAS DESIGNED TO INTERCEPT RUNOFF FROM THE LOTS AND STREETS TO THE WEST. THIS EXISTING CHANNEL CONVEYS RUNOFF TO AN EXISTING DETENTION POND ALONG THE EASTERN PROPERTY BOUNDARY THAT IS CONTAINED WITHIN A 40' DRAINAGE EASEMENT. RUNOFF FROM THE DETENTION POND SPILLS THROUGH A CONTROLLED OUTFALL STRUCTURE WHERE IT IS THEN PUMPED. THERE ARE TWO EXISTING SIDEWALK CULVERTS ON LA ORILLA ROAD THAT WILL BE RELOCATED ABOUT 20 FEET TO THE EAST SO THEY ARE NOT IN THE MIDDLE OF THE NEW DRIVEWAY ENTRANCE.

PROPOSED DEVELOPED CONDITIONS: THE EXISTING CHANNEL LOCATED ALONG THE SOUTH PROPERTY LINE OF THIS LOT (LOT 1) IS TO BE CONVERTED AND EXPANDED TO REPLACE THE EXISTING PORTION OF THE POND ALONG THE PROJECT SITE'S EAST PROPERTY BOUNDARY.

THE 100 YR PEAK DISCHARGE FROM THE SITE IS 6.67 cfs. THE SITE WILL ALSO ACCEPT OFFSITE FLOWS (SB 101-2.93 cfs) FROM THE SOUTHERN PORTION OF LA ORILLA RD THAT ENTER THROUGH THE TWO EXISTING SIDEWALK CULVERTS.

THE HYDROLOGY WAS CALCULATED PER COA DPM USING AHYMO $P_m=2.49$ FROM NOAA 14. THE RESULTS ARE SUMMARIZED IN THE HYDROLOGY TABLE ON THIS SHEET.

DRAINAGE FROM THE BUILDING WILL RUNOFF TOWARDS THE EAST TO THE ROAD AND THEN TO EITHER A SUMP INLET OR TOWARDS THE 16 FOOT WIDE RUNDOWN LOCATED AT THE NE CORNER OF THE POND AREA. THE TWO SUMP INLETS WILL BE CONNECTED TO THE POND THROUGH AN 18" STORM PIPE. THE RUNDOWN WILL BE PROTECTED BY BOLLARDS. THE POND WILL HAVE A MAXIMUM DEPTH OF 3.5 FEET.

THE DETENTION POND DESIGN VOLUME FOR THE EXISTING POND WAS 1.50 AC-FT. THE CALCULATED VOLUME OF THE EXISTING POND LOCATED ON LOT 1 AS DETERMINED BY RECENT SURVEY INFORMATION IS 0.43 AC-FT. THE PROPOSED POND WILL HAVE A DESIGN VOLUME OF 0.59 AC-FT. THIS WILL ALLOW FOR A SMALL FACTOR OF SAFETY.

WITHIN THE DETENTION POND THE WATER WILL BE RELEASED TO THE EXISTING ADJACENT CHANNEL SOUTH OF THE SITE IN THE 40' EASEMENT AND RELEASED BY THE EXISTING LIFT STATION FURTHER DOWNSTREAM.

Basin Data

Basin ID	% D	% C	Area	Q(100)	Volume
100	76.5	23.5	1.54 AC.	6.67 cfs	.2781 AC-FT
101	88	12	0.6643 AC.	2.93 cfs	.1097 AC-FT

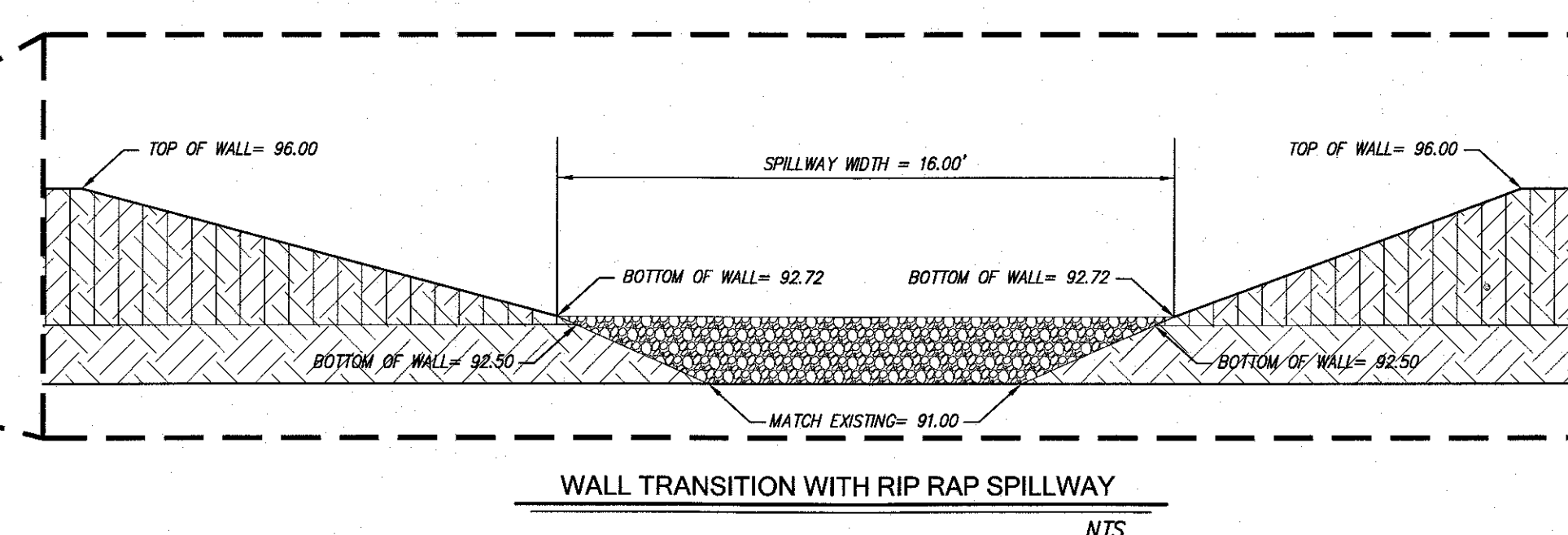
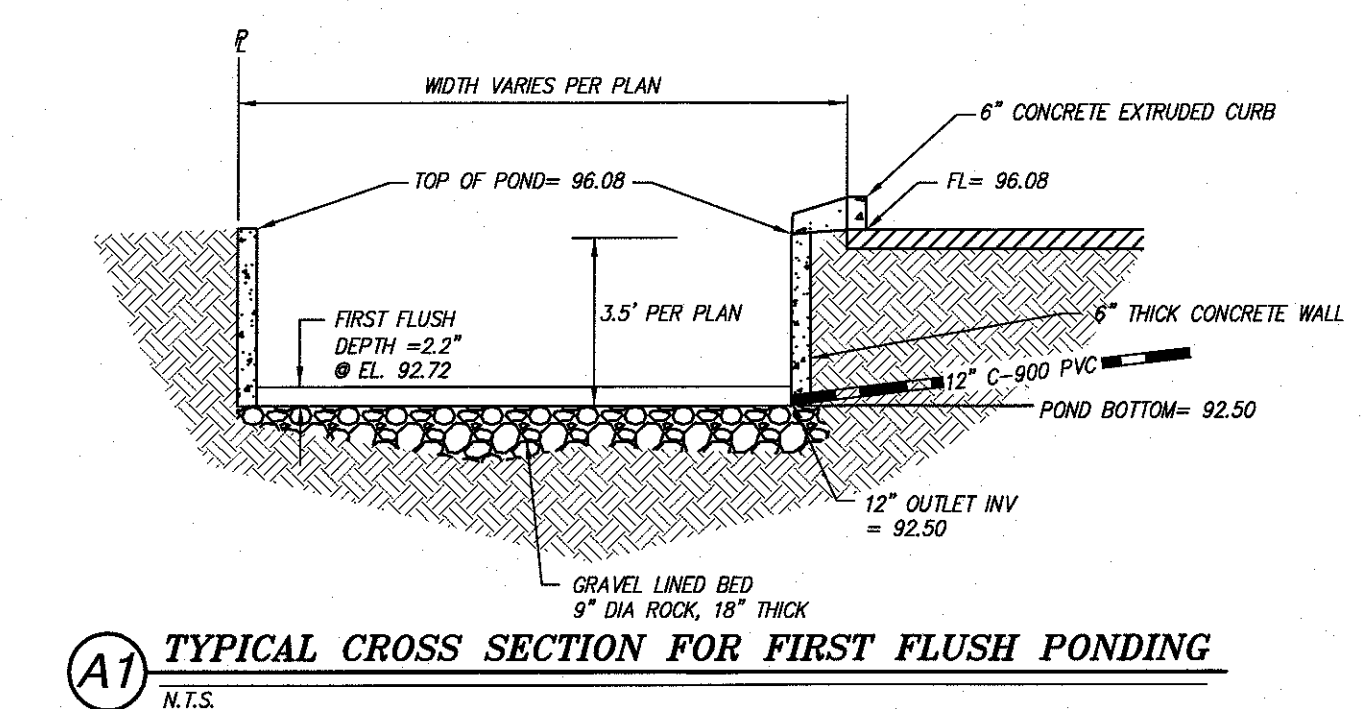
THE INTENT OF THIS PLAN IS TO PROVIDE COMPLETE DETENTION OF THE DEVELOPED, 100 YEAR, 24 HR. STORM.

FIRST FLUSH

THE "FIRST FLUSH" IS BEING ACCOMPLISHED THROUGH THE DETENTION POND ON SITE.

REQUIRED VOLUME = $0.34'' \times$ IMPERVIOUS AREA
= $0.34''/12 \times (57316 \text{ SF})$
= 1624 CF
= .04 AC-FT
= 2.2'

DEPTH = 3.5' (SEE DETAIL) POND BOTTOM = 92.5
AREA = 7294 SF
VOLUME = 25529 CF = .59 AC-FT



dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 OFFICE (505) 828-2200, FAX (505) 797-9539	
CITY OF ALBUQUERQUE PLANNING DEPARTMENT	
TITLE: GUARDIAN STORAGE CONCEPTUAL GRADING & DRAINAGE PLAN	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
LAST DESIGN UPDATE	MO./DAY/YR.
CITY PROJECT NO.	ZONE MAP NO. E-12
	SHEET C101