

CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

March 20, 2018

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

**RE: Sage Ranch Subdivision
Grading and Drainage Plan
Stamp Date: 03/16/18
Hydrology File: M09D025A**

Dear Mr. Goodwin:

Based upon the information provided in your resubmittal received 03/16/2018, the Grading and Drainage Plan is approved for action by the DRB on the Preliminary Plat and DRC Work Order approval.

Just a reminder, this site currently shows more than 1 acre of disturbance is being proposed. An Erosion and Sediment Control Plan is required and has to be submitted to the storm water quality engineer (Curtis Cherne, PE, ccherne@cabq.gov). Hydrology's approval for DRC Work Order Plans will not be given until the submittal of the ESC Plan.

Also please provide an Agreement and Covenant per Chapter 17 of the DPM for detention pond prior to Hydrology's approval for DRC Work Order Plans.

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

Sincerely,

Renée C. Brissette

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

THE PROJECT SITE IS LOCATED ON THE WEST SIDE OF ALBUQUERQUE, AND IS BOUNDED BY SNOW WISLA BLVD. TO THE WEST AND SOUTH OF THE SAGE MARKET COMMERCIAL DEVELOPMENT, A DEVELOPED LOT TO THE EAST AND A CONCRETE DRAINAGE CHANNEL TO THE SOUTH. A 33-LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION IS BEING PROPOSED TO BE CONSTRUCTED ON THE 3.76 ACRE PROPERTY. IT WILL HAVE ONE ACCESS ENTRANCE ROAD, ON THE WEST SIDE OF THE PROPERTY. THE SITE IS SHOWN ON ACCESS ATLAS PAGE M-9-Z.

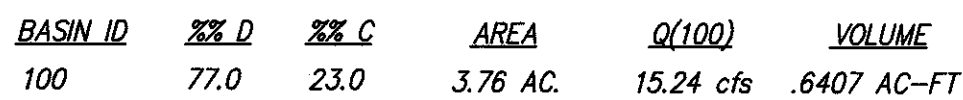
THE SITE IS NOT LOCATED IN A 100YR FLOOD ZONE PER FEMA FIRM MAP 35001C0336H, AUGUST 2012.

THE 3.76 ACRE SITE IS CURRENTLY UNDEVELOPED AND THE FLOW PATTERN FOR THIS AREA IS IN A GENERAL WEST TO EAST DIRECTION. THE EXISTING CHANNEL ALONG THE EASTERN PROPERTY BOUNDARY WAS DESIGNED TO INTERCEPT RUNOFF FROM THE LOTS AND FROM THE CONTROLLED RELEASE POND WITHIN THE COMMERCIAL PROPERTY TO THE NORTH AT A RATE OF 17.49 cfs. THE RUNOFF GENERATED FOR THE 26-LOT RESIDENTIAL PROPERTY IN THE REPORT IS 8.92 cfs. THIS EXISTING CHANNEL CONVEYS ALL RUNOFF THROUGH A 20' DRAINAGE EASEMENT TO THE EXISTING SUN SAGE HILLS SUBDIVISION.

THE 100 YR PEAK DISCHARGE GENERATED BY THE SITE IS 15.24 CFS. THE SITE DOES NOT ACCEPT ANY OFFSITE FLOWS.

THE HYDROLOGY WAS CALCULATED PER COA DPM USING AHYMO $P_{24}=2.60"$ FROM NOAA 14. THE RESULTS ARE SUMMARIZED IN THE HYDROLOGY TABLE ON THIS SHEET.

ACCORDING TO THE SAGE MARKET PLACE DRAINAGE REPORT ALL FLOWS FROM BOTH THE COMMERCIAL AND RESIDENTIAL SITE ARE RESTRICTED TO 17.49 cfs. THE DISCHARGE FROM THE POND ON THE COMMERCIAL SITE IS RESTRICTED TO AN ORIFICE PLATE THAT WAS PREVIOUSLY CONSTRUCTED WITH THE POND. THE DISCHARGE FROM THE RESIDENTIAL PROPERTY WILL BE RESTRICTED TO RELEASE AT 8.12 CFS TO JENNY COURT VIA THE EXISTING 12" CONCRETE CHANNEL. THE TOTAL DISCHARGE OF ALL COMBINED FLOWS FOR THE RESIDENTIAL AND COMMERCIAL SITES WILL STILL REMAIN LESS THAN THE ALLOWABLE 17.49 cfs.



FIRST FLUSH

$$\begin{aligned}\text{REQUIRED VOLUME} &= 0.34" \times \text{IMPERVIOUS AREA} \\ &= 0.34"/12 \times (125888 \text{ SF}) \\ &= 3566 \text{ CF} \\ &= .08 \text{ AC-FT}\end{aligned}$$

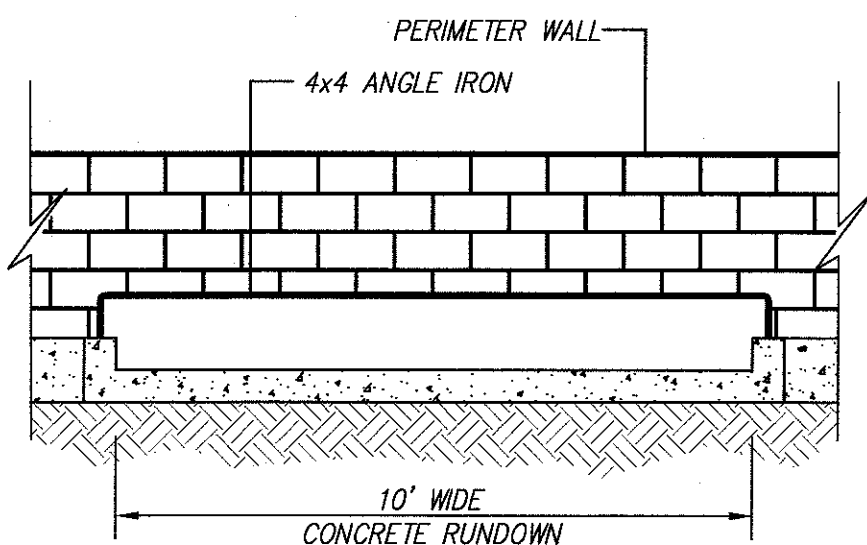
A cross-sectional diagram of a pond structure. The diagram shows a rectangular pond with a sloped bottom. The top of the pond is at an elevation of 27.00. The maximum water surface elevation (WSEL) is 26.30. The first flush depth is 8 inches, with an elevation of 25.00. The pond bottom is at an elevation of 24.33. The structure is built with 6-inch thick concrete or masonry walls. The bottom of the pond is composed of a gravel-lined bed, 2-3 inches of diameter rock, and 6 inches of thick material. Two 4-inch PVC pipes are shown, with an inverted elevation of 25.45. The width of the pond varies per plan.

Labels and dimensions in the diagram include:

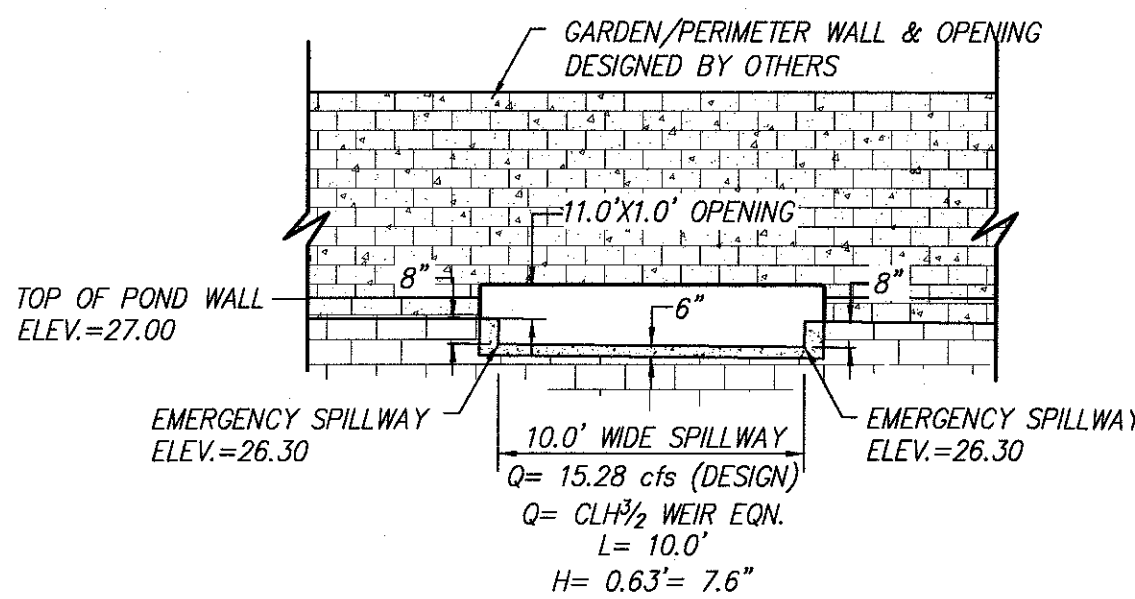
- WIDTH VARIES PER PLAN
- TOP OF POND= 27.00
- MAX WSEL= 26.30
- FIRST FLUSH DEPTH = 8" EL. 25.00
- 2.0' PER PLAN
- 6" THICK CONCRETE/MASONRY WALL
- POND BOTTOM= 25.00
- FIRST FLUSH POND BOTTOM= 24.33
- GRAVEL LINED BED
- 2-3" DIA ROCK, 6" THICK
- 4" PVC PIPE INV EL=25.45
- 4" PVC PIPE INV EL=25.45

(P1) DEPTH = 2.0'
POND BOTTOM ELEVATION = 5125.00
POND TOP ELEVATION = 5127.00'

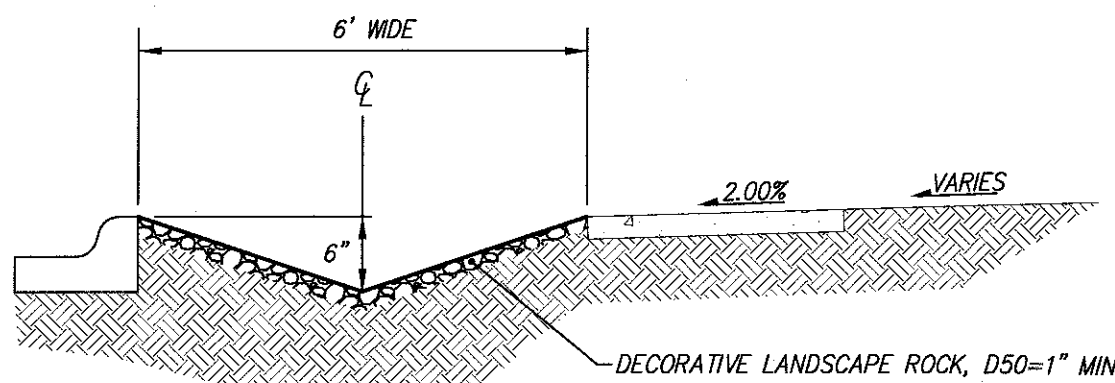
N.T.S.



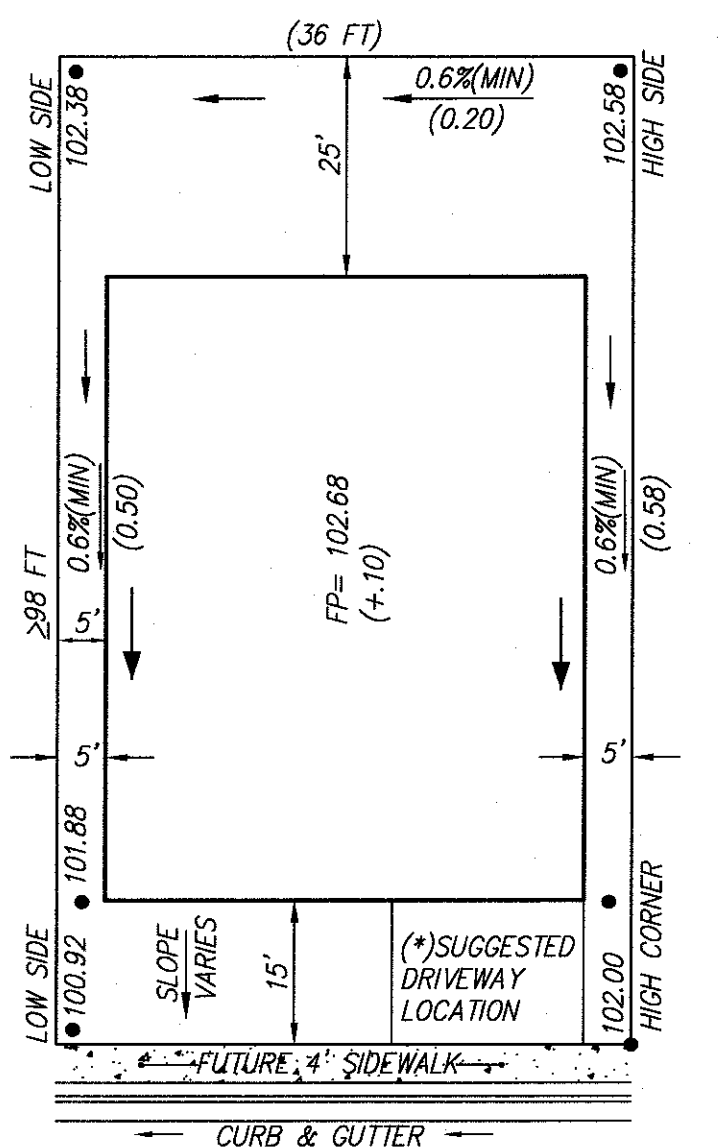
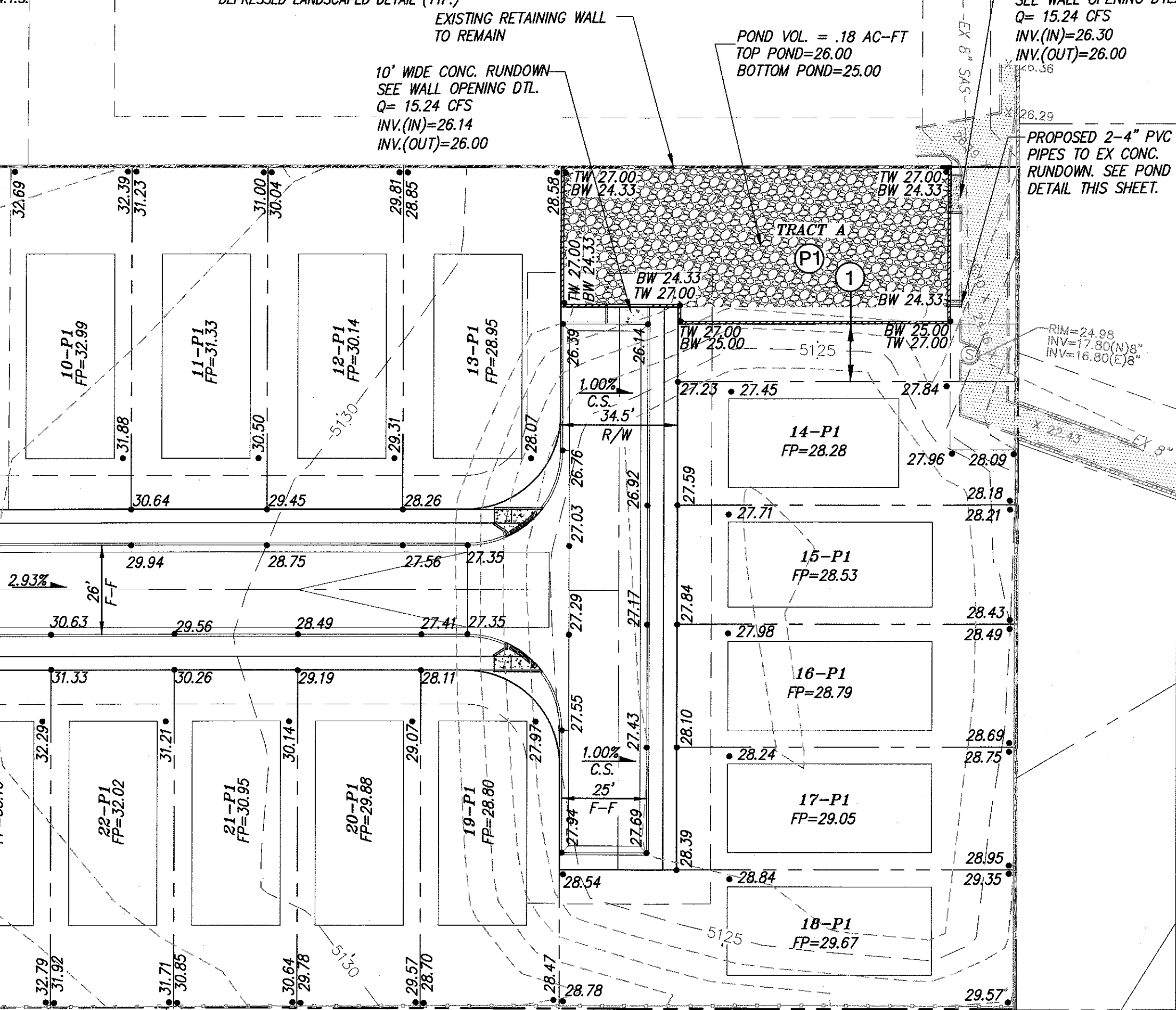
N.T.S.



NTS



NTS



SCALE: 1"=20' (FOR LOTS 1-P1 THRU 33-P1)

ON ALL LOTS WHERE FINISHED PAD IS > 2.0 FEET HIGHER THAN LOW CORNER OF LOT, DRIVEWAY SHOULD BE CONSTRUCTED ON HIGH SIDE OF PAD/LOT. THIS WILL HELP MINIMIZE THE STEEPNESS OF DRIVEWAY SLOPE.

A TRACT OF LAND SITUATE WITHIN THE TOWN OF ATISCRO GRANT, PROJECTED SECTION 33, TOWNSHIP 10 NORTH, RANGE 2 EAST, NEW MEXICO PRINCIPAL MERIDIAN, CITY OF ALBUQUERQUE, BERNALLILLO COUNTY, NEW MEXICO BEING ALL OF LOTS 1-P1 THROUGH 33-P1, TOGETHER WITH SAGE RANCH COURT RIGHT-OF-WAY OF SAGE RANCH SUBDIVISION AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF SAGE RANCH, FILED FOR RECORD IN THE OFFICE OF THE BERNALLILLO COUNTY CLERK ON OCTOBER 31, 2006, IN VOLUME 2006C, PAGE 337 BEING 3.76 ACRES MORE OR LESS.

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WEETING THE SOIL TO KEEP IT FROM BLOWING.
5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.

CAUTION:
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATIONS TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

① NEW 17' PUBLIC SANITARY SEWER EASEMENT
GRANTED TO A.B.C.W.U.A.

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
OFFICE (505) 828-2200, FAX (505) 797-9539



TITLE:

DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL

MO./DAY/YR.	MO./DAY/YR.
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CITY PROJECT NO

ZONE MAP NO

M-9-Z

SHE