CITY OF ALBUQUERQUE

Planning Department David Campbell, Director



Mayor Timothy M. Keller

February 20, 2019

Shawn Biazar SBS Construction & Engineering, LLC. 10209 Snowflake Ct. NW Albuquerque, NM 87114

RE: Aloha RV Expansion 8212 Pan American Fwy NE Grading and Drainage Plan Engineer's Stamp Date: 2/6/19 Hydrology File: C18D104

Dear Mr. Biazar:

PO Box 1293 Based on the submittal received on 2/8/19, the Grading and Drainage Plan cannot be approved until the following a corrected:

Prior to Grading Permit:

Albuquerque 1. Allowable discharge for this area is 3.14cfs/ac (not 3.41), including paved frontage on Holly and Carmel. When determining your site's allowable discharge, be sure to deduct the frontage to the centerline, which free-discharges.

NM 87103

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- 2. Proposed contours need to tie-in at the property line; relook along the west side of your site. The proposed contours also seem to ignore the presence of curbs and pond A seems to encroach on the drive aisle.
- 3. Delineate and provide the area of new paving; Paving Permit approval likely needs to be requested as well. Show how the areas of new paving will be routed into a storm water quality pond (curbcut and rundown into pond A?).
- 4. Basins need to be delineated, and the ponds sized for the areas draining to them. Increased discharges or modified discharge points to the NMDOT ROW will require their approval.
- 5. Pond details are lacking. Pond volume calculations need to determine the surface area and associated volume by each contour. The pond B volume calculation doesn't match the callout on the plan. Provide primary and emergency spillways for the ponds, supported with hydraulic calculations and include freeboard.

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- 6. Bernalillo County Recorded <u>Drainage Covenants (No Public Easement)</u> are required for the storm water control ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for Grading Permit. Because there is no Certificate of Occupancy for this work, the covenant needs to be recorded first.
- 7. This project requires an ESC Plan, submitted to the Storm Water Quality Engineer (Curtis Cherne PE, ccherne@cabq.gov or 924-3420).
- 8. "Calculations" references an AHYMO Model which is not provided.
- 9. Include project benchmark and datum.
- PO Box 1293 10. Add note on the plan that "No work shall be performed in the public ROW without an approved Work Order or Excavation Permit."
 - 11. Provide recorded crosslot drainage easements across all affected parcels, prior to grading Permit.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

NM 87103

Albuquerque

Sincerely,

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Dana Peterson, P.E. Senior Engineer, Planning Dept. Development Review Services

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City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

| Project Title: ALOHA RV, 8212 PAN AMERICAN FWY | _Building Permit #: | Hydrology File #: |
|--|--|---|
| DRB#: | EPC#: | Work Order#: |
| Legal Description:LOTS A, B C, D-1, BLOC | K 17, NORTH ALBUQUERQUE | ACRES, TRACT A, UNIT B |
| City Address: 8212 PAN AMERICAN FWY, NE | | |
| Applicant:SBS CONSTRUCTION AND ENG | GINEEING, LLC | Contact: SHAWN BIAZAR |
| Address: 10209 SNOWFLAKE CT., NW, ALB | UQUERQUE, NM 87114 | |
| Phone#: (505) 804-5013 | _Fax#: (505) 897-4996 | E-mail: AECLLC@AOL.COM |
| Other Contact: | | Contact: |
| Address: | | |
| Phone#: | _Fax#: | E-mail: |
| TYPE OF DEVELOPMENT: PLAT | (# of lots) RESIDENO | CE DRB SITE _X ADMIN SITE |
| IS THIS A RESUBMITTAL? Yes | <u>X</u> No | |
| DEPARTMENT TRANSPORTATION | X HYDROLOGY/DR | AINAGE |
| Check all that Apply: | | APPROVAL/ACCEPTANCE SOUGHT: |
| TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING? | APPLIC CER APPLIC SITH SITH SITH FINA APPLIC SIA/ FOU X GRA QRA QRA QRA QRA CLC FLO | LDING PERMIT APPROVAL TIFICATE OF OCCUPANCY LIMINARY PLAT APPROVAL E PLAN FOR SUB'D APPROVAL E PLAN FOR BLDG. PERMIT APPROVAL AL PLAT APPROVAL TRELEASE OF FINANCIAL GUARANTEE INDATION PERMIT APPROVAL ADING PERMIT APPROVAL ING PERMIT APPROVAL ING PERMIT APPROVAL ADING/ PAD CERTIFICATION RK ORDER APPROVAL IMR/LOMR ODPLAIN DEVELOPMENT PERMIT IER (SPECIFY) |
| DATE SUBMITTED: 2-7-2019 | By: SHAWN BIAZA | |
| COA STAFF: | ELECTRONIC SUBMITTAL REC | |

RUNOFF CALCULATIONS FOR 100 YEAR/6 HOUR STORM

 BASIN
 AREA (SF)
 AREA (AC)
 AREA (MI^{*})

 ON-SITE
 180,179.14
 4.1363
 0.006463

$E = \frac{EA(AA) + EB(AB) + EC(AC) + ED(AD)}{AA + AB + AC + AD}$

V-360 = Weighted E (AA + AB + AC + AD)/12

EA = 0.66 EB = 0.92 EC = 1.29 ED = 2.36

LAND TREATMENT DEVELOPED CONDITION AA = 0.00% AB = 10.00% (18,017.91 SF) AC = 68.14.00% (104,933.27 SF) AD = 31.76% (57,227.96 SF)

DEVELOPED Weighted E = 1.72 V360 (DEVELOPED) = 25,833.81 CF

A = 1.87 CFS/AC B = 2.60 CFS/AC C = 3.45 CFS/AC D = 5.02 CFS/AC

TOTAL QP = QPA AA + QPB AB + QPC AC + QPD AD QP (DEVELOPED) = 17.39 CFS

POND CALCULATIONS

VOL = (TOP AREA + BOTTOM AREA) / 2 * (TOP ELEVATION - BOTTOM ELEVATION)

SURFACE AREA (Pond A) ELEV (FT) AREA (SF) 5198.00 1,334.99 5195.00 182.88 *PONDING VOLUME = 2,276.81* CF

 SURFACE AREA (Pond B)

 ELEV (FT) AREA (SF)

 5195.00
 5,137.71

 5191.00
 1,201.31

PONDING VOLUME = *12*,678.04 CF

TOTAL PONDING VOLUME PROVIDED = 14,954.85 CF

REQUIRED 1ST FLUSH VOLUME = (57,228)x0.34/12 = 1,621.46 CF

ALLOWABLE DISCAHRGE BASED ON SAD 224:

HOLLY BASIN 22.91 ACRES

TOTAL RUOFF Q = 72.00 CFS ALLOWABLE DISCHARE PER ACRE = 72.00/22.91 = 3.41 CFS/AC TOTAL DISCHARGE = 55,721.35/43,560 x 3.41 = 13.00 CFS

Location

This site is located at souheast corner of I-25 frontage and Carmel Ave. NE, containing 4.1363 acre. See attached portion of Vicinity Map for exact location.

Purpose

The purpose of this drainage report is to present a grading and drainage solution for new parking area for the RVs and parking area in front of the existing building.

Existing Drainage Conditions

This site falls within draiage plan for SAD 224. Based on the allowable of 72 cfs and basin area of 22.77 acres which caculates to be 3.15 cfs/acre. Therefore the total allowable discharge from this site is approximately 13.00 cfs. The site currently drains from east to west and then south to exiting culverts.

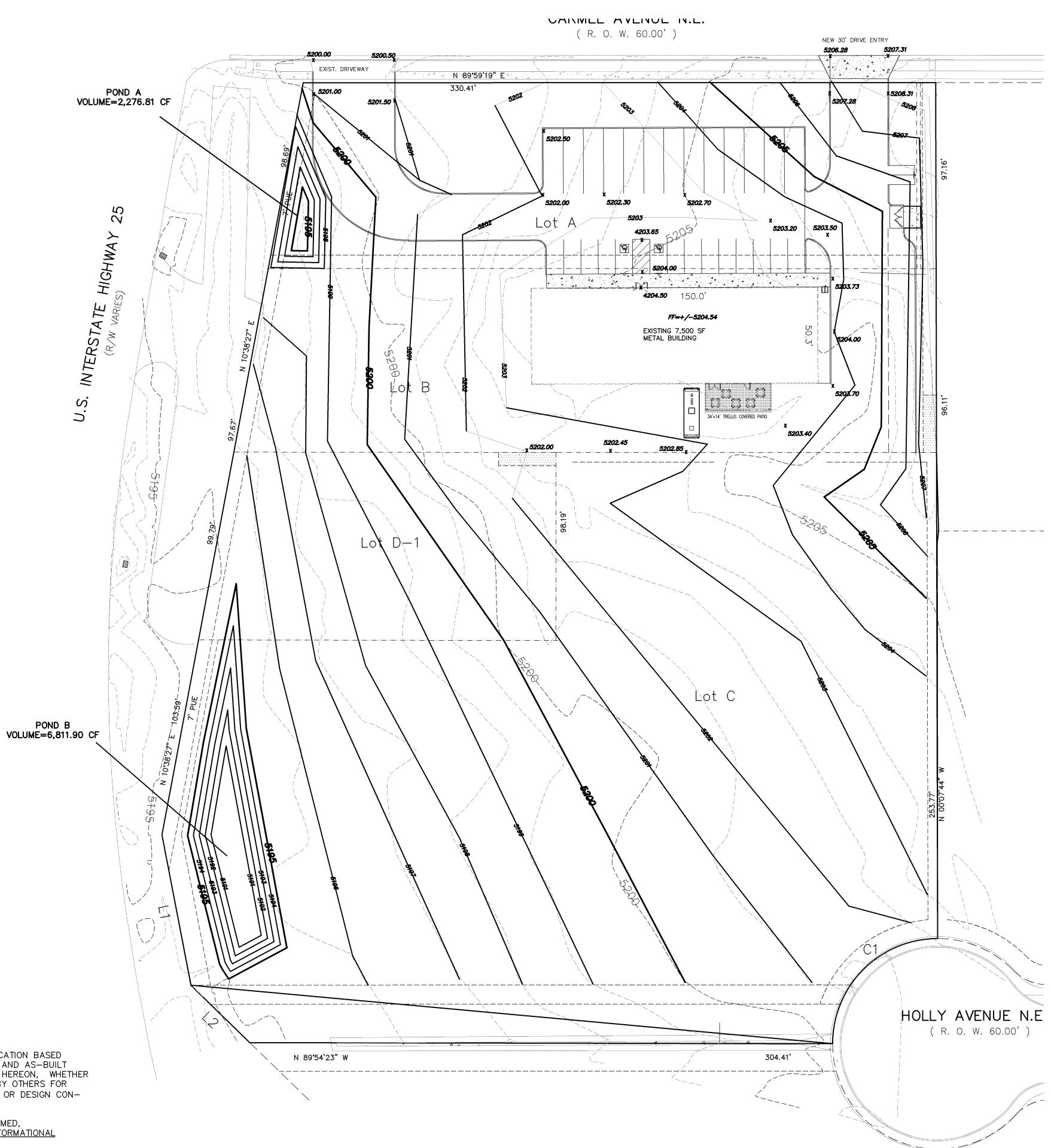
Proposed Conditions and On-Site Drainage Management Plan

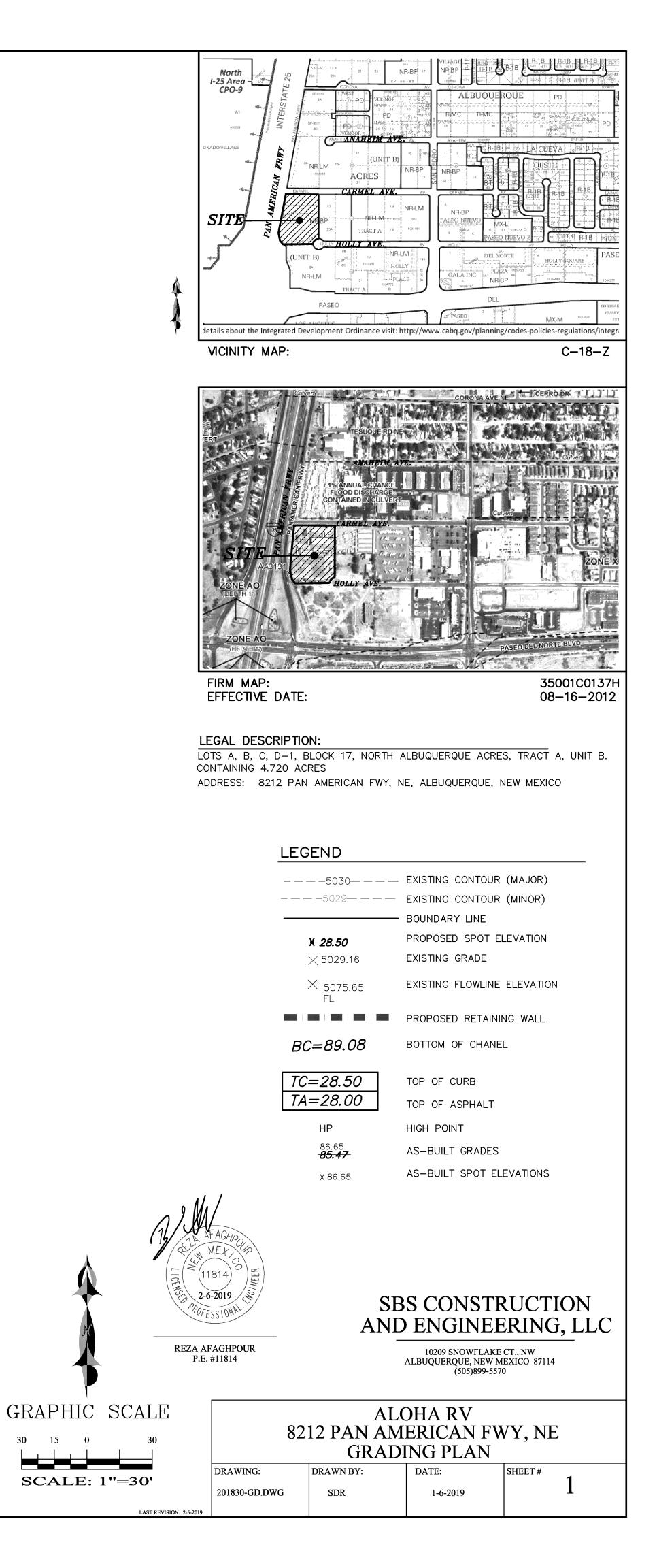
The drainage pattern will reamin the same as exisiting conditions conditions. Since there is an increase in runoff under the proposed conditions and allowable discharge. more than half of the generated volume will be retained wihin two proposed ponds on-site.

Calculations

City of Albuquerque, Development Process Manuel, Section 22.2, Hydrology Section, was used for runoff calculations. See this plan for AHYMO input and Summary output files.

- 1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
- 2: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
- 3: THIS IS <u>NOT</u> A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR <u>INFORMATIONAL</u> <u>PURPOSES ONLY</u>.
- 4: SLOPES ARE AT 3:1 MAXIMUM.
- 5: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION ZAB_B, HAVING AN ELEVATION OF <u>5195.09</u> FEET ABOVE SEA LEVEL.





HOLLY AVENUE

EXISTING CONDITIONS:

The existing storm drainage runoff discharges into 4 - 48" x 212' CMP's that eventually drain in a westerly direction under I-25. See Figure 3. Currently Holly Avenue is an unpaved street. Holly drains from San Pedro west to the existing 48" CMP's. Two inlets on the north west and north east corner of the intersection will be constructed with the PDN project to drain a low spot on the north east corner and to ensure that flows are not conveyed down Holly from adjacent areas. The runoff from San Pedro will be conveyed to Paseo Del Norte through the proposed storm sewer system to be constructed for PDN. The existing drainage runoff pattern within the Holly Avenue corridor will essentially remain the same.

PROPOSED CONDITIONS:

Holly Avenue is to be asphalt paved and 40' Face/Face within the street right-of-way width. A 40' radius cul-de-sac (to the north) at the terminus of Holly Avenue is to be constructed. Sidewalk culverts with a asphalt channel will be built to allow positive drainage from Holly into an existing ditch along the east frontage road of I-25, that will then convey the proposed drainage runoff into existing 4 - 48" x 212' CMP's.

| BASIN NAME | CONDITION | BASIN AREA (ac) | HYDRO ZONE | A" LANID (ac) | B" LANID (ac) | C' LAND (ac) | D" LAND (ac) | Etotal (in) | VOLUME (ac-ft) | Q100 (cfs) |
|---------------|-----------|-----------------------|---------------|------------------|------------------|-----------------|-----------------|----------------|-------------------|---------------|
| HOLLY | EXISTING | 22.91 | 2 | 9.00 | 0.00 | 9.00 | 5.00 | 1.11 | 25.71 | 66.00 |
| HOLLY | PROPOSED | 22.91 | 2 | 9.00 | 0.00 | 5.00 | 9.00 | 1.29 | 28.05 | 72.00 |

TABLE 1.7 - HOLLY AVENUE EXISTING AND PROPOSED CONDITIONS

REFERENCE FIGURE 3



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A CONTRACTOR

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FIGURE 3 HOLLY AVE.