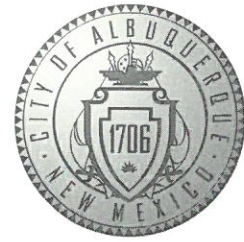


CITY OF ALBUQUERQUE



October 25, 2017

Hugh Floyd
Respec
5971 Jefferson St NE
Albuquerque, NM 87109

RE: **Bosque Brewery**
I-25 west Frontage Rd between Venice & Pasadena
Conceptual Grading and Drainage Report
Stamp Date: 10/24/17
Hydrology File: B18D022

Dear Mr. Floyd:

Based upon the information provided in your submittal received 10/24/17, the above referenced submittal cannot be approved for Site Plan for Building Permit or Building Permit until the following comments are addressed:

PO Box 1293

Prior to Site Plan for Building Permit:

Albuquerque

NM 87103

www.cabq.gov

1. A cross lot drainage easement will be required with University of Phoenix in order to discharge onto their lot. In coordination with Transportation, a reciprocal access easement (DPM Ch.23 (6), figure 23.6.3) may modified to include cross lot drainage and must be recorded prior to SPBP approval.
2. Separate subbasin 1 into 2 subbasins, showing what first flush volume flows to WQ Pond 1 vs. WQ Pond 2. Each pond needs to be large enough to retain the first flush volume for its subbasin.
3. WQ Pond 3 needs to be increased to retain 150CF. Alternatively, Fee-in-Lieu may be made for the bypass volume (\$8.00/CF x 4CF) if no other options are available.
4. At the drop inlets on Venice, extend the riprap mattress around the gutter pans (between the gravel shoulder and the gutterpans.
5. At the drop inlets, include a berm or warp the grading to force the swale towards the inlets and keep higher flows from running behind back-of curb.
6. Recommendation: The French drain for subbasin 1.1 appears to only be able to hold 35CF; whereas the first flush volume is 98CF and the 100year, day volume is 1338CF. Please provide additional retention volume to keep the loading dock usable. Additionally this design seems susceptible to clogging and will be maintenance intensive.

Orig: Drainage file

Albuquerque - Making History 1706-2006

CITY OF ALBUQUERQUE



Prior to Building Permit:

7. This project will require an Erosion and Sediment Control Plan submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov).
8. A Private Facility Drainage Covenant is required for the first flush ponds. The original notarized form, pond exhibit, and recording fee (\$25 payable to City of Albuquerque) 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.
9. Additional comments may be provided at Building Permit, based on the outcome of the above remarks and level of detail shown on plans.

Prior to Work Order Approval:

10. A Bernalillo County Recorded Agreement and Covenant with the owner of Lot A1 to maintain the temporary swale in the Venice ROW will be required.
11. The Work Order plans will need to include a note on the plan view referencing the book and page of the Agreement and Covenant and instructions for the owner of Lot A1 to inspect the ditch after each major rainfall and at least once every 3 months and repair erosion with aggregate base course.

Prior to Hydrology Approval for Certificate of Occupancy:

12. The Private Facility Drainage Covenant for the first flush ponds must be recorded with Bernalillo County and a copy included with the drainage certification.
13. Payment of Fee-in-Lieu will be required for any ponding areas not constructed and certified.

The request for SO-19 appears unnecessary, now that a work order will be part of this project. If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

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

Hydrology Calculations

The following calculations are based on Albuquerque's Development Process Manual, Section 22.2

Runoff Rate:

Treatment Type Areas

| Subbasin | Area _x (ac) | Area _a (ac) | Area _c (ac) | Area _p (ac) | Total (ac) |
|--------------|------------------------|------------------------|------------------------|------------------------|------------|
| Subbasin-1 | 0 | 0.1204 | 0.1204 | 0.7627 | 1.0035 |
| Subbasin-1.1 | 0 | 0 | 0 | 0.0791 | 0.0791 |
| Subbasin-1.2 | 0 | 0 | 0 | 0.1218 | 0.1218 |
| Subbasin-2 | 0 | 0.0654 | 0.0654 | 0.1620 | 0.2927 |
| Subbasin-3 | 0 | 0.0552 | 0.0552 | 0.4416 | 0.5520 |
| Subbasin-4 | 0 | 0.0686 | 0.0686 | 0.2121 | 0.3493 |

Peak Discharge values based on Zone 3 from Table A-9

$$Q_A = 1.87 \text{ cfs/ac}$$

$$Q_B = 2.60 \text{ cfs/ac}$$

$$Q_C = 3.45 \text{ cfs/ac}$$

$$Q_D = 5.02$$

Peak Discharge calculation for a 100-yr, 24-hr storm event from equation A-10

| Subbasin | Discharge (cfs) |
|--------------|-----------------|
| Subbasin-1 | 4.6 |
| Subbasin-1.1 | 0.4 |
| Subbasin-1.2 | 0.6 |
| Subbasin-2 | 1.2 |
| Subbasin-3 | 2.6 |
| Subbasin-4 | 1.5 |

Water Quality:

Required Water Quality volume for first flush of 0.34"

| Subbasin | Required Volume (cu. ft.) | Drains to | Volume Provided (cu. ft.) |
|--------------|---------------------------|----------------|---------------------------|
| Subbasin-1 | 941 | WQ Ponds 1 & 2 | 966 |
| Subbasin-1.2 | 150 | WQ Pond 3 | 146 |
| Subbasin-3 | 545 | WQ Pond 4 | 753 |
| Total | 1,637 | WQ Ponds 1-4 | 1,865 |

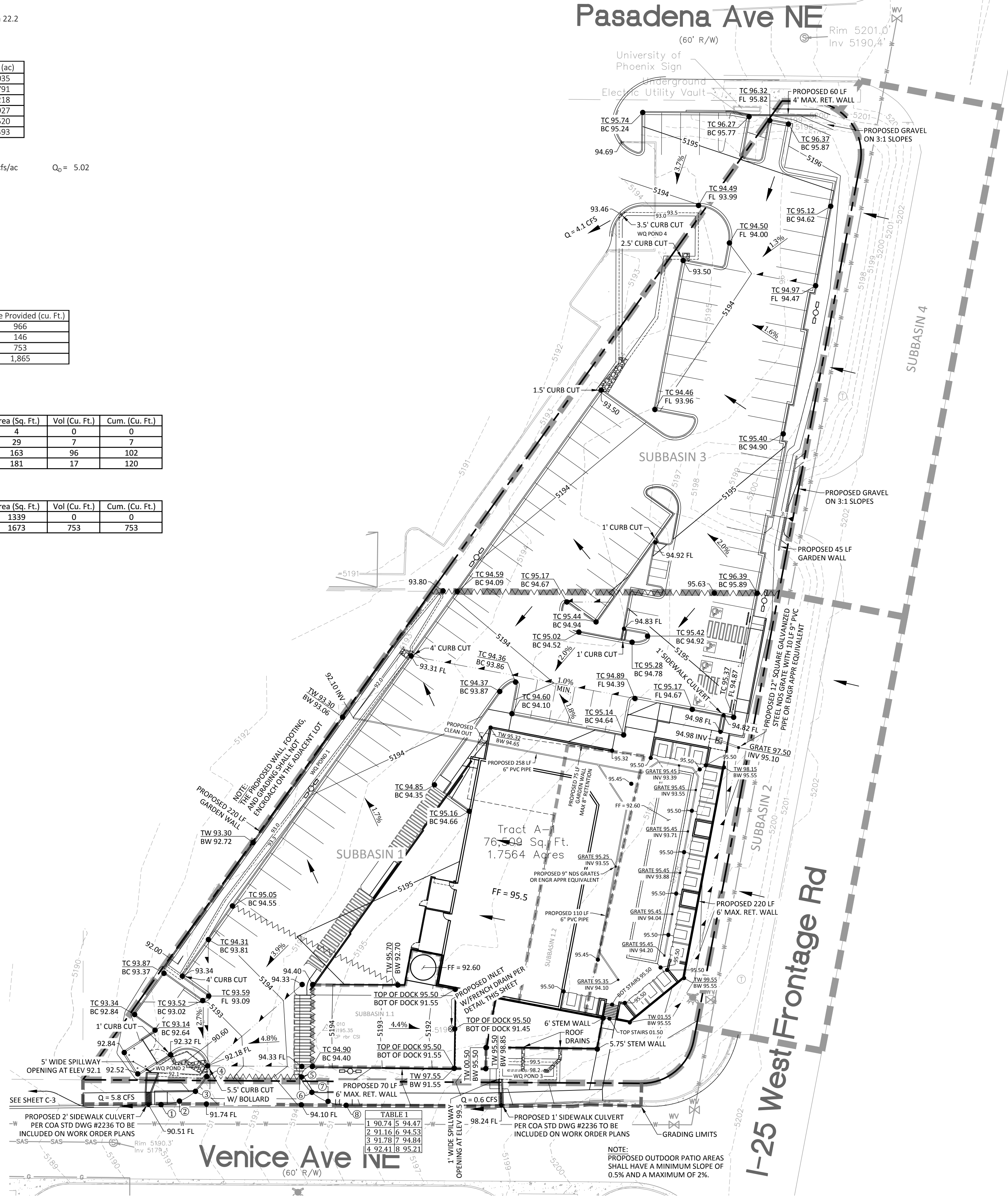
Water Quality Pond Rating Curves

| Elev. | Area (Sq. Ft.) | Vol (Cu. Ft.) | Cum. (Cu. Ft.) |
|--------|----------------|---------------|----------------|
| 5192.0 | 23 | 0 | 0 |
| 5192.4 | 293 | 63 | 63 |
| 5192.5 | 411 | 35 | 98 |
| 5193.0 | 1063 | 369 | 467 |
| 5193.3 | 1466 | 379 | 846 |

| Elev. | Area (Sq. Ft.) | Vol (Cu. Ft.) | Cum. (Cu. Ft.) |
|--------|----------------|---------------|----------------|
| 5189.6 | 4 | 0 | 0 |
| 5190.0 | 29 | 7 | 7 |
| 5191.0 | 163 | 96 | 102 |
| 5191.1 | 181 | 17 | 120 |

| Elev. | Area (Sq. Ft.) | Vol (Cu. Ft.) | Cum. (Cu. Ft.) |
|--------|----------------|---------------|----------------|
| 5198.2 | 11 | 0 | 0 |
| 5199.0 | 130 | 56 | 56 |
| 5199.5 | 227 | 89 | 146 |

| Elev. | Area (Sq. Ft.) | Vol (Cu. Ft.) | Cum. (Cu. Ft.) |
|--------|----------------|---------------|----------------|
| 5193.0 | 1339 | 0 | 0 |
| 5193.5 | 1673 | 753 | 753 |



RIP-RAP NOTES:

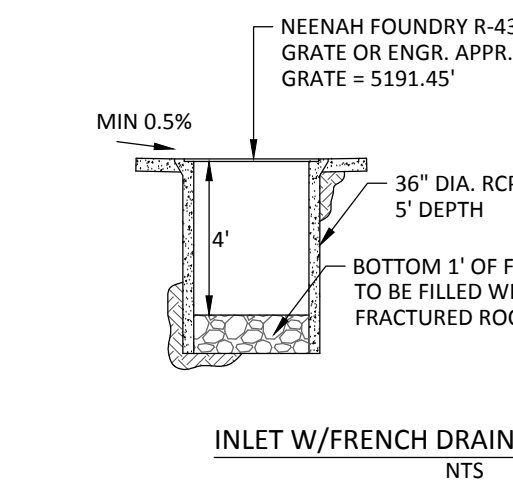
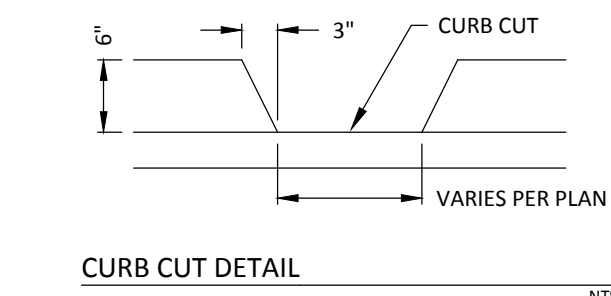
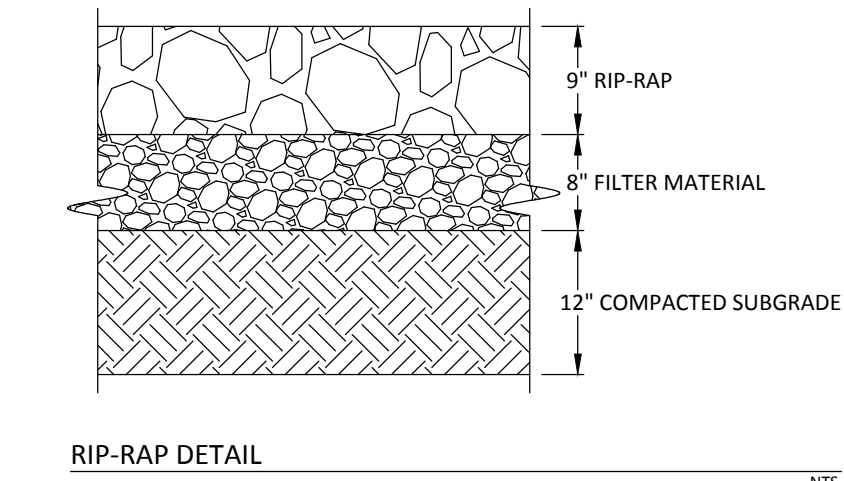
ALL RIP-RAP SHALL CONSIST OF 9" OF RIP-RAP OVER 8" OF FILTER MATERIAL. RIP-RAP SHALL CONSIST OF CRUSHED ROCK MEETING THE FOLLOWING GRADATION OR ENGINEER APPROVED EQUIVALENT.

| MAX. DIMENSION | % SMALLER |
|----------------|-----------|
| 12" | 100 |
| 9" | 50-60 |
| 6" | 35-45 |
| 3" | 10 |

FILTER MATERIAL SHALL CONSIST OF CRUSHED BASALT ROCK MEETING THE FOLLOWING GRADATION OR ENGINEER APPROVED EQUIVALENT.

| U.S. STANDARD SIEVE SIZE | PASSING BY WEIGHT |
|--------------------------|-------------------|
| 1" | 100 |
| 3/4" | 45-65 |
| #4 | 25-45 |
| #40 | 0-20 |
| #200 | 0-5 |

FILTER MATERIAL SHALL BE PLACED UNDER THE RIP-RAP CHANNEL PAVEMENT AND COMPACTED INTO SURFACE VOIDS OF THE RIP-RAP. THE SUBGRADES SHALL BE PROCESSED TO A 12" MIN. DEPTH AND COMPACTED TO 95% MIN. RELATIVE DENSITY PER ASTM D 1557. THE FILTER MATERIAL SHALL BE TAMPED AND SHAPED TO FORM A SMOOTH, EVEN, AND FIRM FOUNDATION FOR THE OVERLYING RIP-RAP. THE CONTRACTOR'S OPERATIONS AND METHODS OF PLACING SHALL PREVENT SEGREGATION OF THE MATERIALS. THE FILTER MATERIAL SHALL BE PLACED AND TAMPED IN THE VOIDS OF THE RIP-RAP.



LEGEND

| | |
|----------------|----------------------------|
| --- | PROPERTY BOUNDARY |
| - - - - | PROPOSED SUBBASIN BOUNDARY |
| - - - - -5195- | EXISTING MAJOR CONTOUR |
| - - - - -5194- | EXISTING MINOR CONTOUR |
| - - - - -5195 | PROPOSED MAJOR CONTOUR |
| - - - - -5194 | PROPOSED MINOR CONTOUR |
| - - - - - | PROPOSED GRADING LIMITS |
| - - - - - | PROPOSED WALL |
| - - - - - | PROPOSED WATER BLOCK |
| - - - - - | PROPOSED FLOW LINE |
| - - - - - | PROPOSED RIP-RAP |
| ● XX.XX | PROPOSED SPOT ELEVATION |
| ● XX.XX TC | PROPOSED TOP OF CURB ELEV |
| ● XX.XX BC | PROPOSED BOTTOM CURB ELEV |
| ● XX.XX FL | PROPOSED FLOW LINE ELEV |
| ● XX.XX INV | PROPOSED INVERT ELEV |
| ● XX.XX TW | PROPOSED TOP OF WALL ELEV |

Background

Tract A-1 accounts for approximately 1.75 acres in Block 3, NAA Tract A, Unit B within the City of Albuquerque, Bernalillo County, New Mexico. This property is located west of the I-25 West Frontage Road between Venice Avenue and Pasadena Avenue. The site is currently undeveloped. The site receives offsite flows from the I-25 West Frontage Road located east of the property. The flow rate from the frontage road is accounted for in the runoff calculations. There is no floodplain on the site.

The southern portion of Tract A-1 is allowed free discharge to Venice Avenue and the northern portion of Tract A-1 is allowed free discharge to Pasadena Avenue per the San Mateo Business Park Drainage Report (SMBPDR) by C.L. Weiss Engineering, Inc. 1999 (B18-D008). Other background reports include the Citicorp Site Drainage Report (CSDR) by Bohannon Huston, Inc. 1996, which is referenced in the SMBPDR, and the Drainage Report for Beverly Hills Ave & Venice Ave Office/Warehouse Public Improvements (BVOWPIDR) by Isaacson & Arfman, P.A. 2000 (B18-D007), which references both the SMBPDR and CSDR.

Methodology

Hydrology Calculations for the site are performed in accordance with the Albuquerque Development Process Manual (DPM) Section 22.2 using the Rational Method to calculate peak flow rates in order to ensure all flow paths are sufficient to carry flows effectively throughout the site. The water quality pond volumes are calculated using a first flush runoff value of 0.34". All hydrologic and hydraulic calculations can be found on this sheet.

Existing Conditions

The existing property slopes from east to west at approximately 3%. Historically, the site drains across the adjacent property to the west. Runoff eventually reaches Venice Avenue and enters a storm drain system designed in the BVOWPIDR.

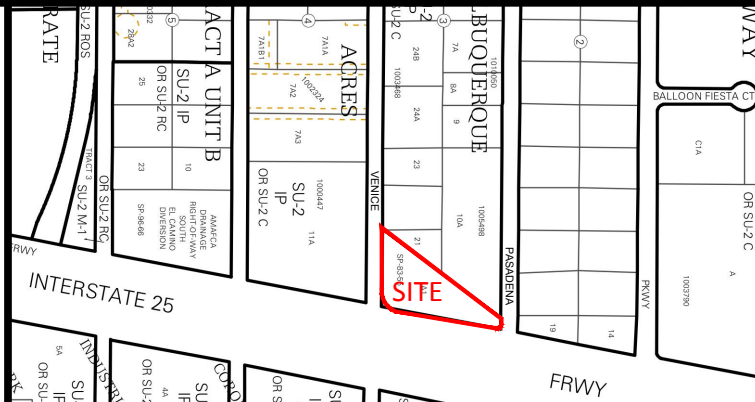
Proposed Conditions

The property has been split into four separate subbasins. See the Hydrology Calculations located at the top left corner of this sheet for peak flow rates and required water quality volumes.

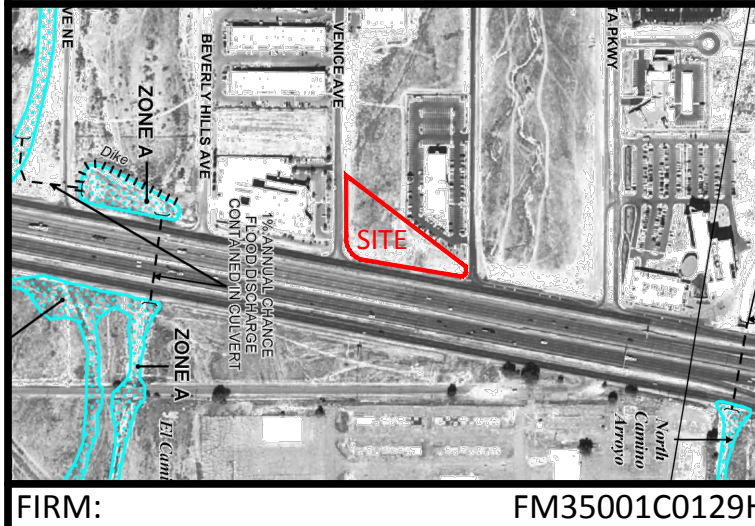
Subbasin 1 consists of the southern portion of the site. It is 1.0 acre and generates 4.6 cfs. Subbasin 2 consists of a portion of the I-25 West Frontage Road that enters Subbasin 1. Subbasin 2 is 0.3 acres and generates 1.2 cfs. Therefore, the southern portion of Tract A-1 has a peak rate of 5.8 cfs discharging into Venice Ave. Water from Subbasin 1 first enters WQ Pond 1 located along the western boundary of the property, which provides 846 cubic feet of water quality volume. The water quality pond rating curves are included on the left side of this sheet. There is also a small diameter storm drain that collects water in the patio area that discharges to WQ Pond 1. When full, water leaves WQ Pond 1 through a 4" curb opening into the parking lot. Runoff then enters WQ Pond 2, which is 120 cubic feet. The total amount of water quality volume provided for this subbasin is 966 cubic feet, which is greater than the required amount of 941 cubic feet. Once WQ Pond 2 fills, water spills through a 5'x6" spillway at an elevation of 92.1'. Runoff is routed under the sidewalk in a 2' sidewalk culvert and discharges into Venice Avenue. Once the runoff is offsite, water flows west in the proposed gravel lined swale until reaching the proposed inlets located approximately 350' west of the subject property (see BVOWPIDR). These inlets will connect to an existing storm drain. This existing storm drain has capacity to accept the proposed flows from the southern portion of Tract A-1 per the BVOWPIDR referenced above. The owner of Tract A-1 has agreed to maintain these interim facilities in the public right-of-way until such time that the downstream roadway is constructed. See sheet C-2 for more details.

Subbasins 1.1 and 1.2 are located within Subbasin 1. Subbasin 1.1 is 0.1 acres and generates 0.4 cfs. Subbasin 1.1 is the truck dock located at the southwest corner of the building. Runoff in this subbasin is collected by an inlet into a french drain. The details are included on this sheet. Subbasin 1.2 is 0.1 acres and generates 0.6 cfs. This subbasin collects drainage from a portion of the roof. Runoff from this subbasin enters WQ Pond 3, which contains 146 cubic feet of storage. Once full, water discharges through a 1' sidewalk culvert at an elevation of 99.5' and into Venice.

Subbasin 3 consists of the northern portion of Tract A-1. It is 0.6 acres and generates 2.6 cfs. Subbasin 4 consists of a portion of the I-25 West Frontage Road that enters Subbasin 3. Subbasin 4 is 0.3 acres and generates 1.5 cfs. Therefore, the northern portion of Tract A-1 has a peak flow rate of 4.1 cfs discharging to Pasadena Ave. Water from Subbasin 3 flows generally to the northwest and enters WQ Pond 4. WQ Pond 4 is 753 cubic feet, which is greater than the required water quality volume of 545 cubic feet. Once full, WQ Pond 4 discharges water into the University of Phoenix (UoP) property located northwest of Tract A-1. The owner of the UoP property has agreed to allow cross-lot drainage. The site plan is included on sheet C-3. See Hydrology file B18-D014. Runoff eventually reaches 8-2' sidewalk culverts at the northwest corner of the UoP site. The amount of flow reaching the sidewalk culverts from the UoP site is 11.0 cfs. See Hydrology Calculations on sheet C-3. The proposed 4.1 cfs from the northern portion of Tract A-1 brings the total amount of proposed flow to these 8-2' sidewalk culverts to 15.1 cfs. The sidewalk culverts have capacity for 18.8 cfs. See the Manning's and Weir calculations on sheet C-3. Therefore, the UoP property has capacity for the proposed flows. Once runoff discharges out of the sidewalk culverts, the downstream system in Pasadena has capacity to accept the proposed flows from the northern portion of Tract A-1 per the SMBPDR referenced above.

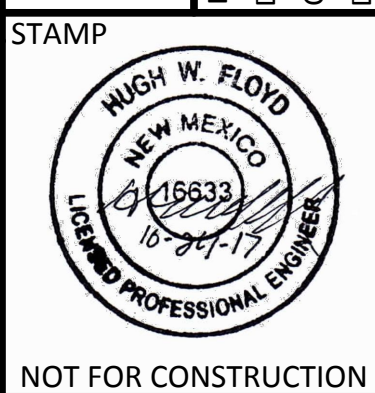


VICINITY MAP:



FIRM: FM35001C0129H

| REVISION | DATE | BY | CHKD |
|----------|------|----|------|
| | | | |
| | | | |
| | | | |
| | | | |



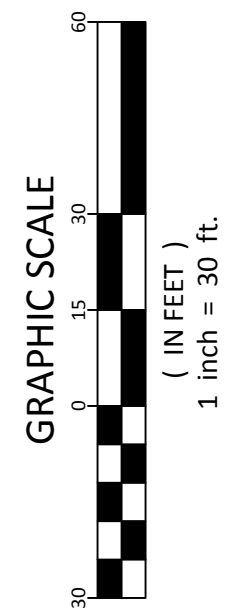
NOT FOR CONSTRUCTION

LEGAL DESCRIPTION:

TRACT A-1, BLOCK 3, NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

I-25 WEST FRONTAGE ROAD VENICE & PASADENA

CONCEPTUAL GRADING & DRAINAGE PLAN



SHEET NUMBER:

C-1

The following calculations are based on Albuquerque's Development Process Manual, Section 22.2

Treatment Type Areas

Peak Discharge values based on Zone 3 from Table A-9

Peak Discharge calculation for a 100-yr, 24-hr storm event from equation A-10

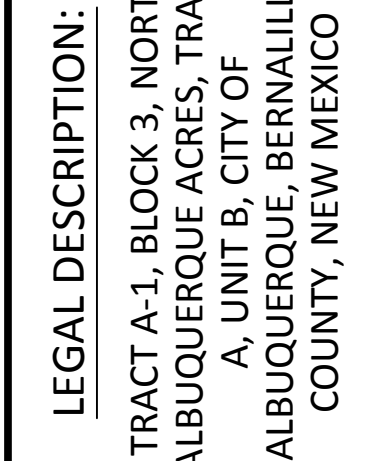
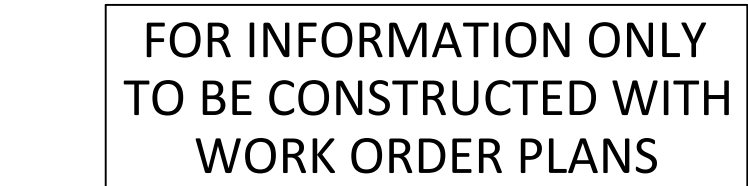
GRAVEL SWALE MANNING'S CALCULATION

Input

Output

GRAVEL SWALE DETAIL

NTS



GRAPHIC SCALE

(IN FEET)

1 inch = 20 ft.

SHEET NUMBER:

C-2

Hydrology Calculations

The following calculations are based on Albuquerque's Development Process Manual, Seciton 22.2

Runoff Rate:

Treatment Type Areas

| Subbasin | Area _{A₁} (ac) | Area _{A₂} (ac) | Area _{A₃} (ac) | Area _{A₄} (ac) | Total (ac) |
|------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------|
| Subbasin-1 | 0 | 0.0728 | 0.0728 | 0.5822 | 0.7277 |
| Subbasin-2 | 0 | 0.2375 | 0.2375 | 1.8996 | 2.3745 |

Peak Discharge values based on Zone 3 from Table A-9

Q_A = 1.87 cfs/ac Q_B = 2.60 cfs/ac Q_C = 3.45 cfs/ac Q_D = 5.02 cfs/ac

Peak Discharge calculation for a 100-yr, 24-hr storm event from equation A-10

| Subbasin | Discharge (cfs) |
|------------|-----------------|
| Subbasin-1 | 3.4 |
| Subbasin-2 | 11.0 |
| Tract A-1 | 4.1 |
| Total | 15.1 |

8-2' SIDEWALK CULVERTS MANNING'S CAPACITY

Rectangular Channel

Input

Flow 15.1 cfs
Slope 0.02 ft/ft
Manning's n 0.013
Base Width 16 ft
Right Side Slope 0:1
Left Side Slope 0:1

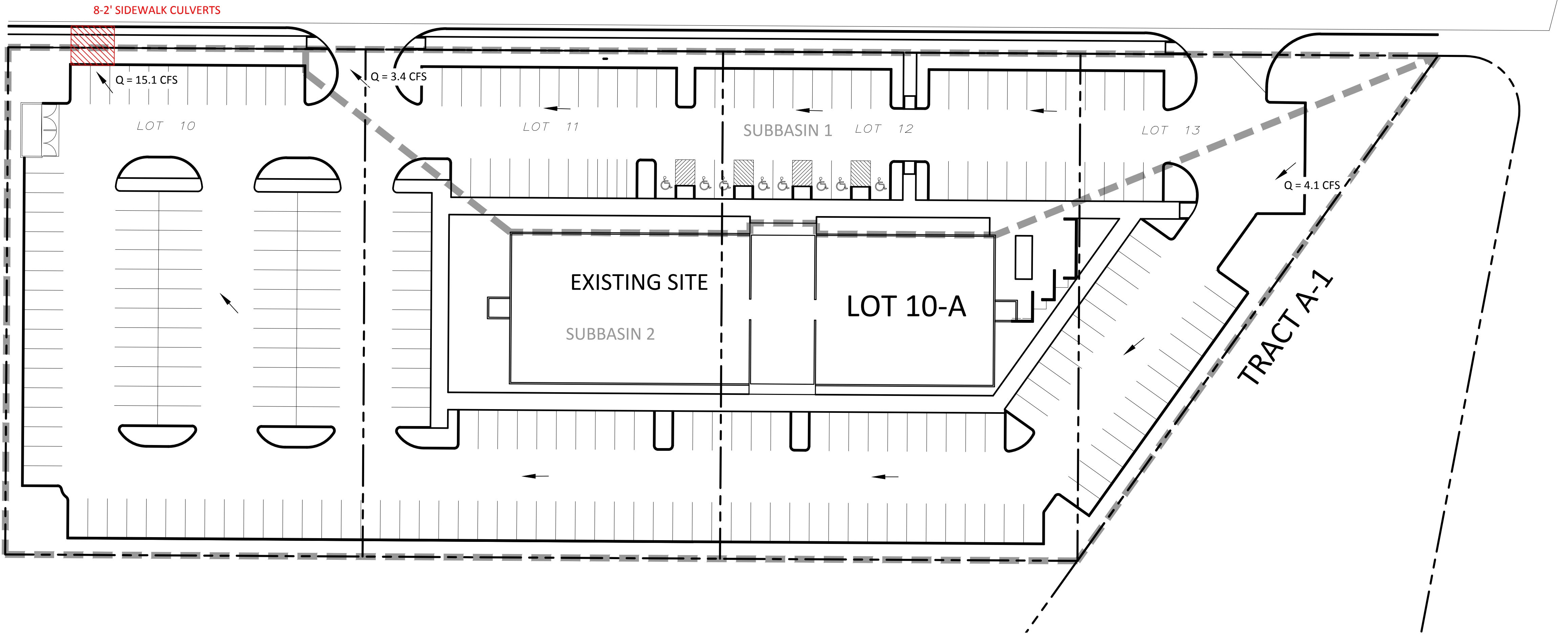
Output

Depth 0.184 ft
Flow Area 2.94 sf
Velocity 5.14 fps
Velocity Head 0.411 ft
Top Width 16.0 ft
Froude Number 2.12
Critical Depth 0.303 ft
Critical Slope 0.00385 ft/ft

Weir Calculation for 8-2' Sidewalk Culverts

Weir:

Head Water Depth (h): 0.5 ft
Discharge Coeff. (C_w): 3.33
Length (L): 16 ft
Flow (Q) = C_w · L · h ^ (1.5)
Flow (Q) = 18.8 cfs > 15.1 cfs [OK]



9971 JEFFERSON ST NE
ALBUQUERQUE, NM 87109
PHONE: 505.366.4187

RESPEC
WATER & NATURAL RESOURCES

DESIGNED
DRAWN
CHECKED
DATE

HF
JS
HF
10/24/17

REVISION

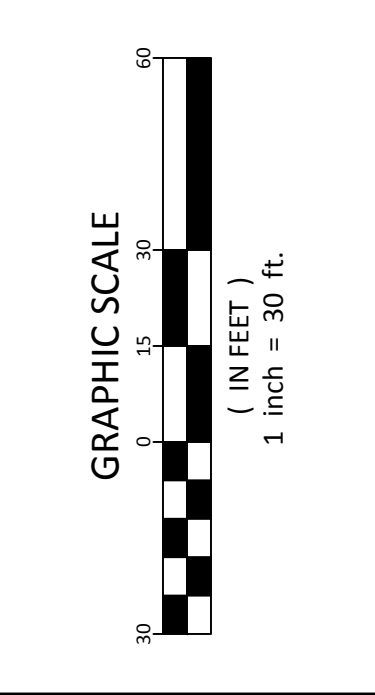
STAMP

HUGH W. FLOYD
NEW MEXICO
15833
10/24/17
LICENSED PROFESSIONAL ENGINEER

NOT FOR CONSTRUCTION

LEGAL DESCRIPTION:
TRACT A-1, BLOCK 3, NORTH
ALBUQUERQUE ACRES, TRACT
A, UNIT B, CITY OF
ALBUQUERQUE, BERNALILLO
COUNTY, NEW MEXICO

I-25 WEST FRONTAGE ROAD
VENICE & PASADENA
LOT 10-A EXHIBIT



SHEET NUMBER:
C-3

Cross Lot Access & Drainage Agreement

This Cross Lot Access & Drainage Agreement pertains to properties located in the City of Albuquerque, Bernalillo County, NM known as Tract A-1 and Lot 10-A, Block 3, North Albuquerque Acres, Tract A, Unit B. _____ is the owner of the property known as Tract A-1 and _____ is the owner of the property know as Lot 10-A. The owners have determined that it is in their mutual interest to have an agreement for cross access and drainage.

Now therefore, in consideration of their mutual promises and intending to be legally bound, the parties agree as follows:

A perpetual, nonexclusive agreement for access and drainage over and across the surface of Lot 10-A defined by **Exhibit A** for the benefit of Tract A-1. This agreement shall not be modified except in writing signed by the owners of the subject properties. This agreement and its obligations and benefits shall run with the land and shall be binding to the benefit of the parties hereto and their respective successors and assigns.

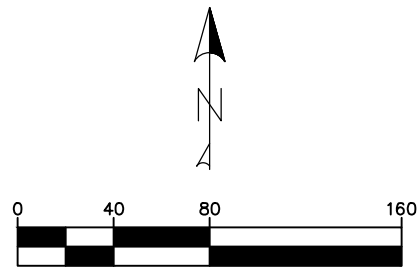
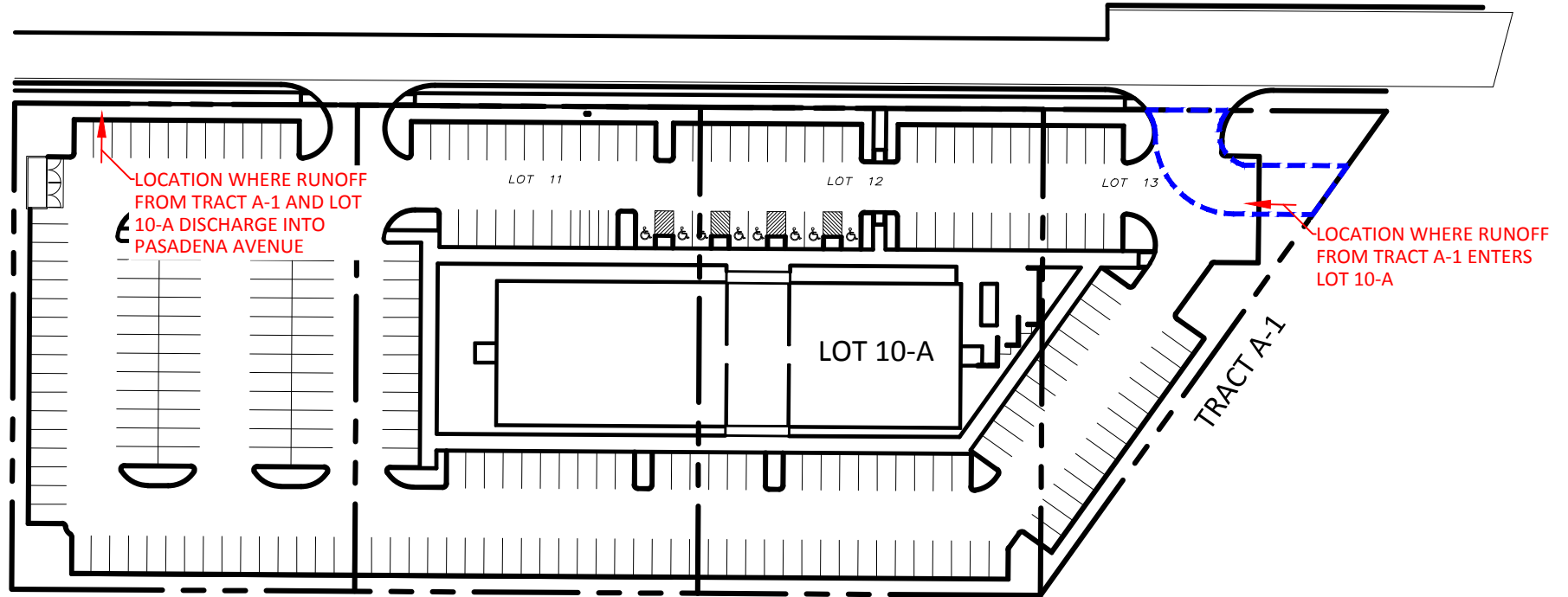
This Agreement dated the ____ of _____, 20____.

,Tract A-1

,Lot 10-A

LEGEND

----- PROPOSED ACCESS EASEMENT



SCALE: 1" = 80'

Exhibit A
August 2017



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: I-25 WEST FRONTAGE BETWEEN VENICE & PASADENA **Building Permit #:** _____ **City Drainage #:** B18-D022
DRB#: 1011348 **EPC#:** _____ **Work Order#:** _____
Legal Description: Tract A-1, Block 3, North Albuquerque Acres, Tract A, Unit B
City Address: _____

Engineering Firm: Respec **Contact:** Hugh Floyd
Address: 5971 Jefferson St NE; Albuquerque, NM 87109
Phone#: (505) 366-4187 **Fax#:** _____ **E-mail:** hugh.floyd@respec.com

Owner: Venice, LLC **Contact:** Angela Williamson
Address: 100 Sun Avenue NE, Suite 305; Albuquerque, NM 87109
Phone#: (505) 338-1499 (Ext. 1000) **Fax#:** _____ **E-mail:** awilliamson@modulusarchitects.com

Architect: Modulus Architects **Contact:** Stephen Dunbar
Address: 100 Sun Avenue NE, Suite 305; Albuquerque, NM 87109
Phone#: (505) 417-4164 **Fax#:** _____ **E-mail:** sdunbar@modulusarchitects.com

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: October 24, 2017

By: Jeremy Shell (Respec)

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____



October 24, 2017

Dana Peterson
Senior Engineer, Planning Dept.
Development Review Services
600 2nd Street NW
Albuquerque, NM 87102

Dear Dana Peterson:

RE: I-25 West Frontage Rd between Venice & Pasadena
Conceptual Grading and Drainage Report
Plan Date: 8/3/17
Hydrology File: B18D022

Attached is the revised Grading & Drainage Plan and supplemental sheets for the proposed development at I-25 West Frontage Road between Venice & Pasadena. The following addresses the comments received on August 22nd, 2017 regarding the submittal to the City of Albuquerque with plan dated August 3rd, 2017:

1. A cross lot drainage easement will be required with University of Phoenix in order to discharge onto their lot.
A draft of the cross-lot drainage easement is attached.
2. An agreement and covenant with the owner of Lot A1 to maintain the temporary swale in the Venice ROW will be required.
Per discussions with you and Doug, it was decided to tie the agreement and covenant to the work order plans. The agreement & covenant is included on the infrastructure list, which is also attached with this submittal.
3. The downstream storm drain inlets will need to be built in accordance with the ultimate design: 1x single A and 1x double C.
The Offsite Exhibit has been modified to show single type "A" and double type "C" inlets. See revised sheet C-2.
4. Per Ch. 22, Section C.e(2) of the DPM, channels draining to inlets must be armored. Provide concrete transition slabs and curb for the inlets and standard curb and gutter between the two inlets. Provide riprap protection around the inlets and immediately upstream.

Curb & gutter has been added between the inlets, a 10' sacrificial section of curb & gutter has been added upstream of the single type "A" inlet, and riprap protection is included upstream of the inlets. See revised sheet C-2.

5971 JEFFERSON ST., NE
SUITE 101
ALBUQUERQUE, NM 87109
505.268.2661



5. Freeboard must be provided for the channel.

As discussed with you and Doug, the swale shall be 1' deep. This provides approximately 0.4' of freeboard. See revised sheet C-2.

6. In section A-A, show the adjacent lot existing grade and the footer (if any); include a note that the wall, footer, and grading will not encroach upon the adjacent lot.

Section A-A is no longer applicable in these latest plans and, therefore, has been removed. The note stating that the wall, footer, and grading will not encroach upon the adjacent lot has been included on the plan. See revised sheet C-1.

7. For conceptual grading and drainage plans, label as "not for construction."

The label "not for construction" has been added. See revised sheet C-1.

If you have any further comments or concerns, please feel free to contact me at (505) 366-4187.

Sincerely,

Hugh Floyd, P.E.
New Mexico Area Manager, Water & Natural Resources

Current DRC
Project No. _____

Date Submitted: October 24, 2017

Date Site Plan Bldg Permit Approved: _____

Date Site Plan for Sub. Approved: _____

Final Preliminary Plat Approved: _____

Final Preliminary Plat Expires: _____

DRB Project No. _____

Figure 12

INFRASTRUCTURE LIST

EXHIBIT 'A'
TO SUBDIVISION IMPROVEMENTS AGREEMENT
DEVELOPMENT REVIEW BOARD (D.R.B.) REQUIRED INFRASTRUCTURE LIST

Tract A-1, Block 3, North Albuquerque Acres, Tract A, Unit B
City of Albuquerque, Bernalillo County, New Mexico

Following is a summary of PUBLIC/PRIVATE Infrastructure required to be constructed or financially guaranteed for the above development. This Listing is not necessarily a complete listing. During the SIA process and/or in the review of the construction drawings, if the DRC Chair determines that appurtenant items and/or unforeseen items have not been included in the infrastructure listing, the DRC Chair may include those items in the listing and related financial guarantee. Likewise, if the DRC Chair determines that appurtenant or non-essential items can be deleted from the listing, those items may be deleted as well as the related portions of the financial guarantees. All such revisions require approval by the DRC Chair, the User Department and agent/owner. If such approvals are obtained, these revisions to the listing will be incorporated administratively. In addition, any unforeseen items which arise during construction which which are necessary to complete the project and which normally are the Subdivider's responsibility will be required as a condition of project acceptance and close out by the City.

| SIA Sequence # | COA DRC Project # | Size | Type of Improvement | Location | From | To | Private Inspector | City Inspector | City Cnst Engineer |
|-------------------|----------------------|----------------------------|---|------------|--|----------------------------------|----------------------|-------------------|-----------------------|
| PAVING | | | | | | | | | |
| <div></div> | <div></div> | VARIES (1' - 3') EDGE-F | 265' PROPERTY FRONTAGE, RESIDENTIAL PAVING W/PCC CURB & GUTTER | VENICE AVE | I-25 WEST FRONTAGE RD | SW CORNER OF SUBJECT PROPERTY | <div>/</div> | <div>/</div> | <div>/</div> |
| <div></div> | <div></div> | 4' WIDTH | PCC SIDEWALK (NORTH SIDE ONLY) | VENICE AVE | I-25 WEST FRONTAGE RD | SW CORNER OF SUBJECT PROPERTY | <div>/</div> | <div>/</div> | <div>/</div> |
| DRAINAGE | | | | | | | | | |
| <div></div> | <div></div> | 18" - 24" DIA | RCP, SINGLE TYPE "A" & DOUBLE TYPE "C" INLETS, & CONNECTION TO EXISTING STORM DRAIN | VENICE AVE | 330' WEST OF THE SW CORNER OF THE SUBJECT PROPERTY | | <div>/</div> | <div>/</div> | <div>/</div> |
| <div></div> | <div></div> | 10' WIDTH | EARTHEN DRAINAGE SWALE, GRAVEL SHOULDER, IN NORTHERN PORTION OF RIGHT-OF-WAY | VENICE AVE | SW CORNER OF SUBJECT PROPERTY | 330' WEST | <div>/</div> | <div>/</div> | <div>/</div> |

AN AGREEMENT & COVENANT WILL BE REQUIRED FOR THE TEMPORARY SWALE PER COA DPM VOLUME I, CHAPTER 17



| AGENT/OWNER | | DEVELOPMENT REVIEW BOARD MEMBER APPROVALS | | | |
|--|------|---|------|--------------------------|------|
| Hugh Floyd | | | | | |
| PREPARED BY: PRINT NAME | DATE | DRB CHAIR | DATE | PARKS & GENERAL SERVICES | DATE |
| RESPEC ENGINEERING | | | | | |
| FIRM: | | TRANSPORTATION DEVELOPMENT | DATE | AMAFCA | DATE |
| SIGNATURE | | ABCWUA | DATE | CITY ENGINEER | DATE |
| MAXIMUM TIME ALLOWED TO CONSTRUCT IMPROVEMENTS WITHOUT A DRB EXTENSION | | | | | |
| | | DATE | | | |



| DESIGN REVIEW COMMITTEE REVISIONS | | | | |
|-----------------------------------|------|-----------|-----------------|-------------|
| REVISION | DATE | DRC CHAIR | USER DEPARTMENT | AGENT/OWNER |
| | | | | |
| | | | | |
| | | | | |