

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

April 11, 2022

David B. Thompson, P.E.
Thompson Engineering Consultants, Inc.
P.O. Box 65760
Albuquerque, NM 87193

**RE: 615 Iron Ave SW
615 Iron Ave SW
Grading and Drainage Plan
Engineer's Stamp Date: 3/16/22
Hydrology File: K14D225**

Dear Mr. Thompson:

Based upon the information provided in your submittal received 3/16/22, the 2nd Revised Grading and Drainage Plan is approved for Grading Permit, Building Permit, and SO-19 Permit.

PO Box 1293

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

Albuquerque

If the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

NM 87103

www.cabq.gov

Please provide Drainage Covenant for the stormwater quality ponds per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit an electronic file of the Covenant and Exhibit for completeness to Marion G. Velasquez at mgvelasquez@cabq.gov. Once the electronic file is approved for completeness, please submit the original copies along with the \$ **25.00** recording fee check made payable to Bernalillo County to Marion on the 4th floor of Plaza de Sol. Please note that Hydrology will need a pdf copy of the recorded Drainage Covenant prior to Hydrology's approval of Permanent Release of Occupancy.

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

Sincerely,

David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

TYPE OF SUBMITTAL: _____ PLAT (___# OF LOTS) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ DRAINAGE REPORT
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ OTHER (SPECIFY) _____
- _____ PRE-DESIGN MEETING?

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
- _____ FLOODPLAIN DEVELOPMENT PERMIT
- _____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 16-A, BLOCK X, ATLANTIC AND PACIFIC ADDITION

SITE AREA: 0.163 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED SEPTEMBER 26, 2008 (PANEL NO. 35001C0334G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH CHAPTER 6, ARTICLE 6-2, SECTION 6-2(A), ENTITLED "PROCEDURE FOR 40-ACRE AND SMALLER BASINS." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 6-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 2 SO THE 100-YEAR, 6-HOUR STORM EVENT IS 2.29 INCHES. UNDER EXISTING CONDITIONS, THE PROPERTY IS VACANT.

THE PROPERTY IS LOCATED ON IRON, BETWEEN 6TH STREET AND 7TH STREET. THE VACANT LOT DRAINS TO A DEPRESSED ARE IN THE MIDDLE OF THE LOT. THIS PROPERTY IS LOCATED IN ZONE 2. THE PEAK RUNOFF FROM THIS PROPERTY UNDER EXISTING CONDITIONS IS 0.28 CFS DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROPERTY A SINGLE MULTI-FAMILY BUILDING WITH PARKING ON THE NORTH AND SOUTH OF THE BUILDING. THE PROPERTY IS DIVIDED INTO 2 BASINS. BASIN A INCLUDES THE NORTH HALF OF THE BUILDING AND THE PARKING AND LANDSCAPED AREA NORTH OF THE BUILDING. RUNOFF FROM THIS BASIN WILL DRAIN TO TWO SEPARATE WATER QUALITY PONDS. THE WEST PART OF THE BUILDING WILL DRAIN DIRECTLY TO A WATER QUALITY POND NORTHWEST OF THE BUILDING, WHICH WILL DRAIN TO THE PARKING AREA THROUGH A 2-FOOT-WIDE CURB CUT. THE EAST PART OF THE BUILDING WILL DRAIN TO THE WATER QUALITY POND NORTHEAST OF THE BUILDING. THE PARKING AREA AND DUMPSTER WILL DRAIN TO THE EAST WATER QUALITY POND THROUGH A 2-FOOT-WIDE CURB CUTS. THE EAST WATER QUALITY POND WILL DRAIN NORTH TO THE ALLEY THROUGH ANOTHER 2-FOOT-WIDE CURB CUT. THE VOLUME OF THE VOLUME OF THE WATER QUALITY PONDS IS 129 CUBIC-FEET. THE RUNOFF DURING DEVELOPED CONDITIONS FROM BASIN A TO THE ALLEYWAY IS 0.44 CFS.

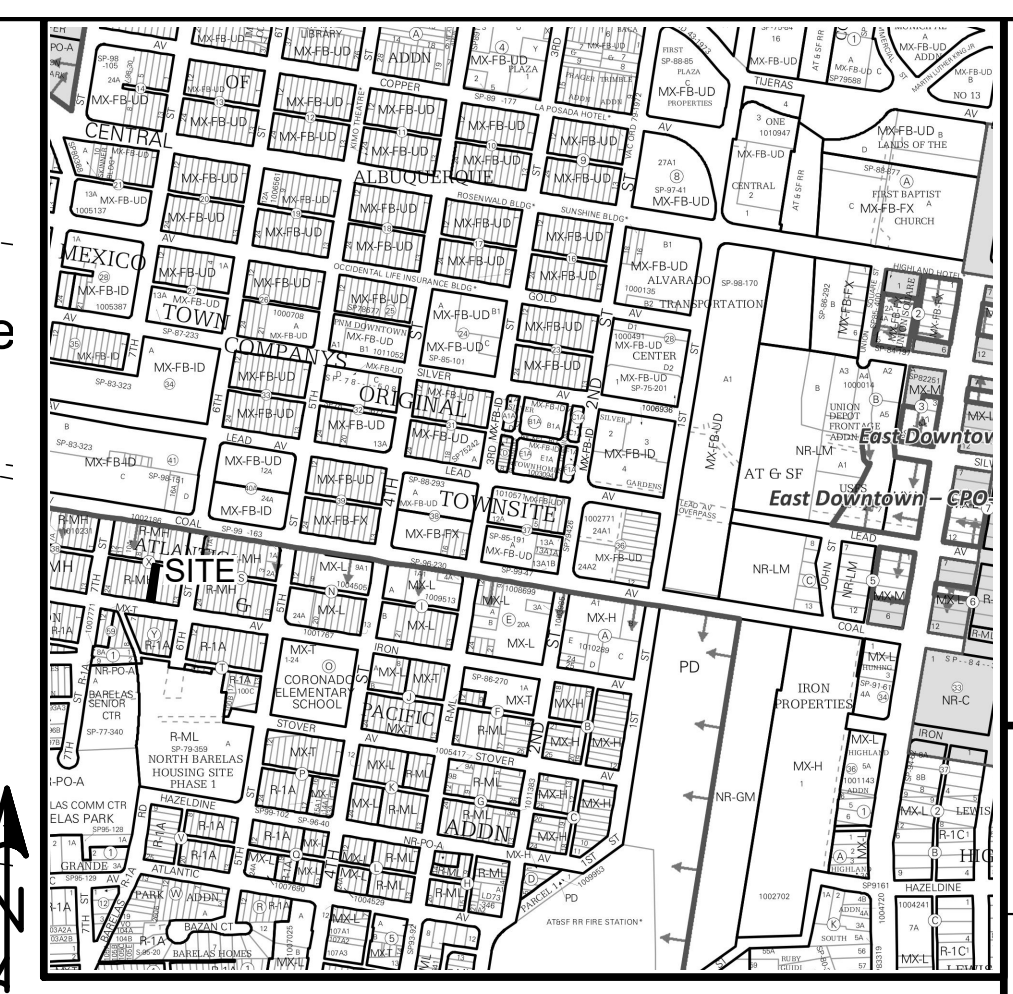
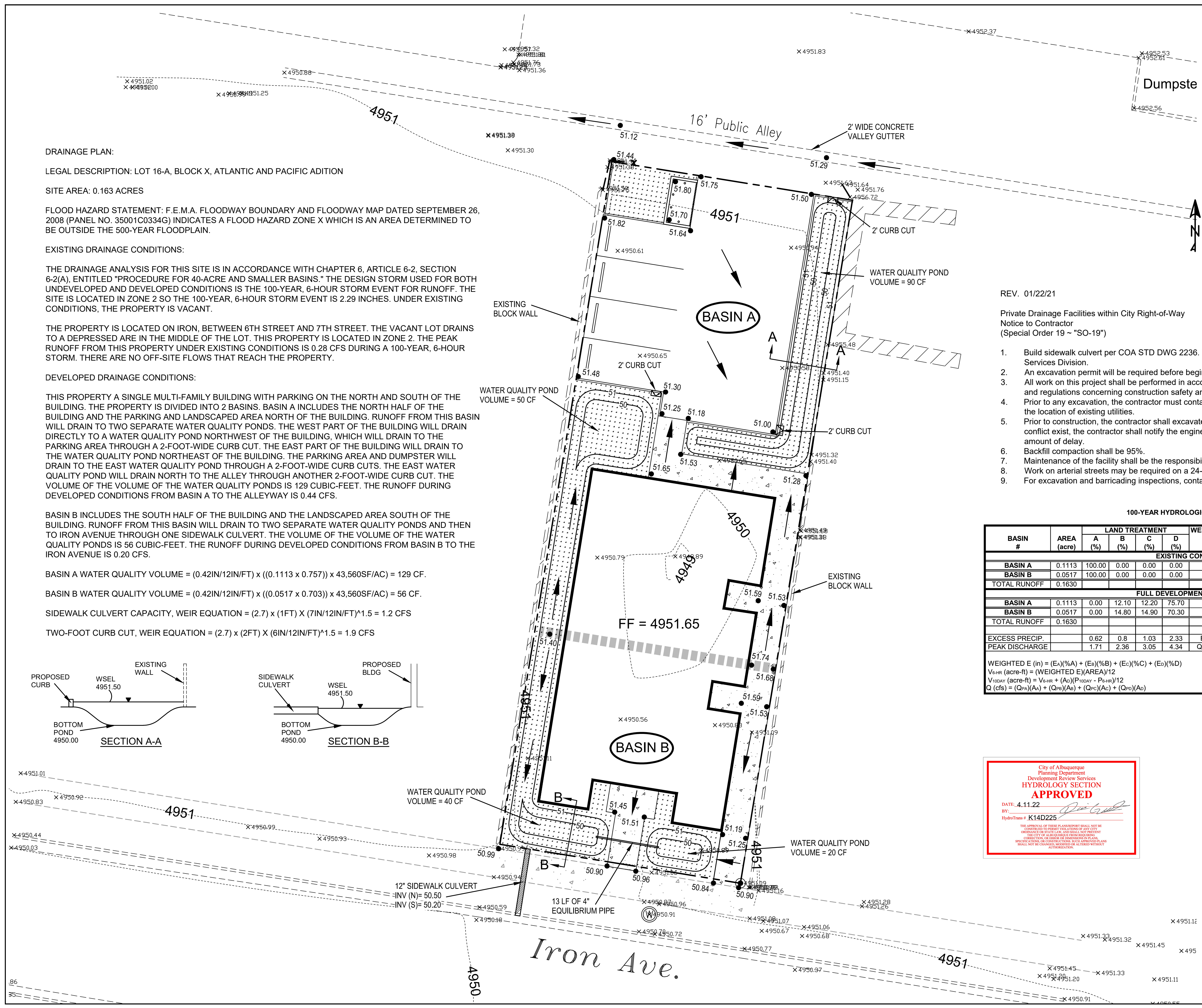
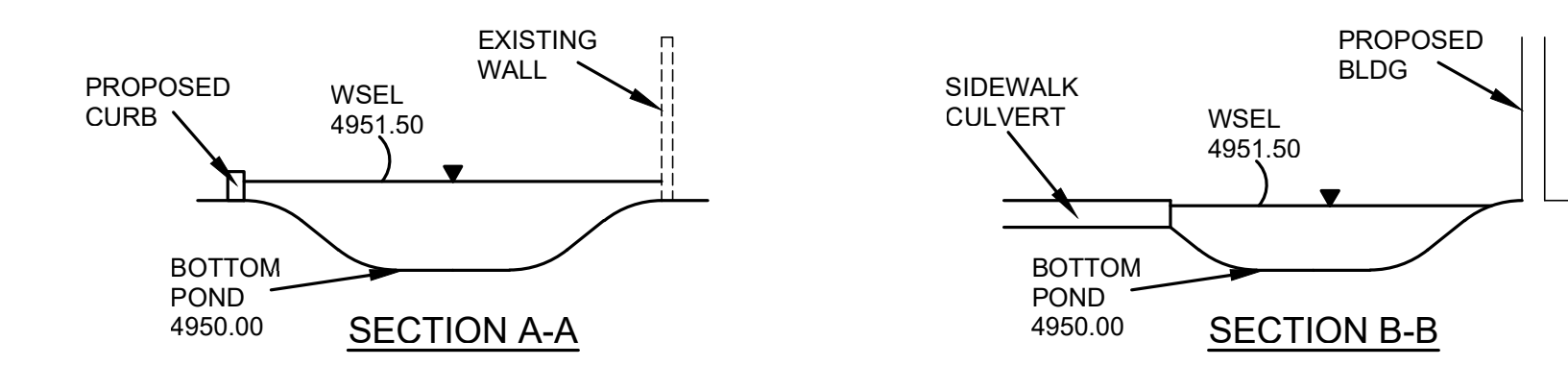
BASIN B INCLUDES THE SOUTH HALF OF THE BUILDING AND THE LANDSCAPED AREA SOUTH OF THE BUILDING. RUNOFF FROM THIS BASIN WILL DRAIN TO TWO SEPARATE WATER QUALITY PONDS AND THEN TO IRON AVENUE THROUGH ONE SIDEWALK CULVERT. THE VOLUME OF THE VOLUME OF THE WATER QUALITY PONDS IS 56 CUBIC-FEET. THE RUNOFF DURING DEVELOPED CONDITIONS FROM BASIN B TO THE IRON AVENUE IS 0.20 CFS.

BASIN A WATER QUALITY VOLUME = $(0.42IN/12IN/FT) \times ((0.1113 \times 0.757)) \times 43,560SF/AC = 129 CF$.

BASIN B WATER QUALITY VOLUME = $(0.42IN/12IN/FT) \times ((0.0517 \times 0.703)) \times 43,560SF/AC = 56 CF$.

SIDEWALK CULVERT CAPACITY, WEIR EQUATION = $(2.7) \times (1FT) \times (7IN/12IN/FT)^{1.5} = 1.2 CFS$

TWO-FOOT CURB CUT, WEIR EQUATION = $(2.7) \times (2FT) \times (6IN/12IN/FT)^{1.5} = 1.9 CFS$



REV. 01/22/21

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 - "SO-19")

1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division.
2. An excavation permit will be required before beginning any work within City Right-Of-Way.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
5. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
6. Backfill compaction shall be 95%.
7. Maintenance of the facility shall be the responsibility of the owner of the property being served.
8. Work on arterial streets may be required on a 24-hour basis.
9. For excavation and barricading inspections, contact DMD Construction Services Division.

100-YEAR HYDROLOGIC CALCULATIONS

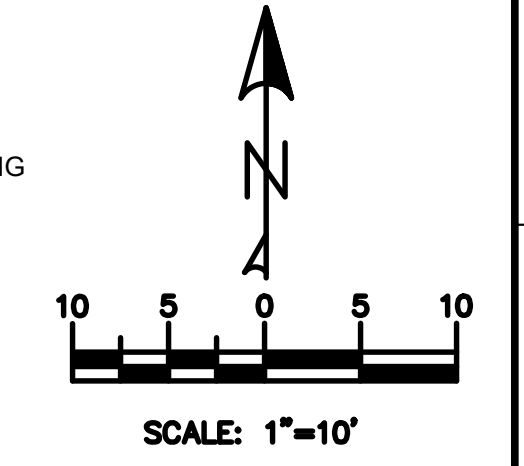
BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	100-YEAR PRECIPITATION				Q (cfs)
		A (%)	B (%)	C (%)	D (%)		V (6-hr) (acre-ft)	V (24-hr) (acre-ft)	V (24-hr) (cu-ft)	V (24-hr) (cu-ft)	
EXISTING CONDITIONS											
BASIN A	0.1113	100.00	0.00	0.00	0.00	0.62	0.01	250	0.01	250	0.19
BASIN B	0.0517	100.00	0.00	0.00	0.00	0.62	0.00	116	0.00	116	0.09
TOTAL RUNOFF	0.1630						0.01	367	0.01	367	0.28
FULL DEVELOPMENT CONDITIONS											
BASIN A	0.1113	0.00	12.10	12.20	75.70	1.99	0.02	802	0.02	894	0.44
BASIN B	0.0517	0.00	14.80	14.90	70.30	1.91	0.01	358	0.01	398	0.20
TOTAL RUNOFF	0.1630						0.03	1,161	0.03	1,292	0.64
EXCESS PRECIP.		0.62	0.8	1.03	2.33	E _i (in)					
PEAK DISCHARGE		1.71	2.36	3.05	4.34	Q _m (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$
 V_{6-HR} (acre-ft) = $(WEIGHTED E)(AREA)/12$
 V_{100DAY} (acre-ft) = $V_{6-HR} + (A_p)(P_{100DAY} - P_{6-HR})/12$
 Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 2
 P_{6-HR} (in.) = 2.29
 P_{24-HR} (in.) = 2.59
 P_{100DAY} (in.) = 3.62



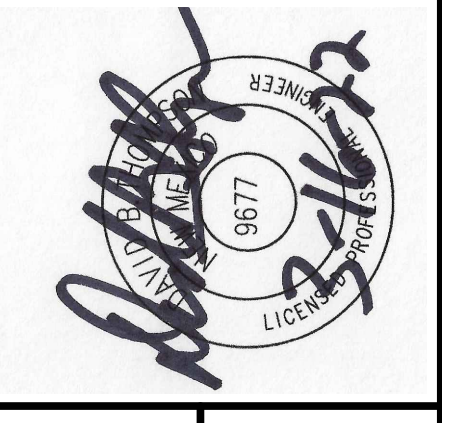
- LEGEND**
- 4951--- EXISTING CONTOURS
 - PROPERTY LINE
 - EXISTING SIDEWALK
 - EXISTING C&G
 - ⊙ EXISTING WATER METER
 - 50.00 PROPOSED SPOT ELEVATION
 - PROPOSED FLOW DIRECTION
 - ▣ PROPOSED 2' CURB CUT
 - ▨ PROPOSED CONCRETE
 - BASIN A BASIN ID
 - LANDSCAPING



Thompson Engineering Consultants, Inc.
 P.O. BOX 65760 ALBUQUERQUE, NM 87193
 PHONE: (505) 271-1999 FAX: (505) 830-9246
 tcc@mtyahoo.com

NO.	REVISION	DATE	BY	FILE:

PROJECT: DRAWN BY: DEM
 DATE: CHECKED BY:
 HORIZ. SCALE: APPROVED BY:
 VERT. SCALE:



LOT 16-A, BLOCK X,
ATLANTIC AND PACIFIC ADDITION
ALBUQUERQUE, BERNALILLO COUNTY, NM
615 IRON AVE. SW

GRADING AND DRAINAGE PLAN

CITY/COUNTY REVIEW

DEPARTMENT	DATE	SIGN-OFF
WASTEWATER MGMT. DIV.		
WATER SERVICES		
SUBDIVISION ENG.		
STREETS		
TRAFFIC		

FOR CITY/COUNTY USE ONLY

SHEET No. **C-1**