

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

November 1, 2021

David Thompson, PE
Thompson Engineering Consultants, Inc.
PO Box 65760
Albuquerque, NM 87193

RE: 407 Vassar Dr. SE
Grading and Drainage Plans
Engineer's Stamp Date: 10/06/21
Hydrology File: K16D092

Dear Mr. Thompson:

Based upon the information provided in your submittal received 10/14/2021, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. Since this site appears to have need little grading for the proposed building, a pad certification is not needed for this project.

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.

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



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 21, BLOCK 21, UNIVERSITY HEIGHTS ADDITION

SITE AREA: 0.163 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0353H) 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 PARTIALLY DEVELOPED WITH A HOUSE AND DRIVEWAY. THE PROPERTY IS LOCATED ON VASSAR, SOUTH OF COAL AVENUE. THERE IS AN EXISTING HOUSE AND DRIVEWAY ON THE PROPERTY. THE LOT DRAINS FROM EAST TO WEST TO AN ALLEY. THIS PROPERTY IS LOCATED IN ZONE 2. THE PEAK RUNOFF FROM THIS PROPERTY UNDER EXISTING CONDITIONS IS 0.50 CFS DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

TWO ATTACHED LIVING AREAS WILL BE CONSTRUCTED BEHIND THE CURRENT HOUSE. THE RUNOFF FROM THIS PROPERTY WILL CONTINUE TO DRAIN WEST TO THE ALLEY. THE RUNOFF FROM THE SITE WILL BE COLLECTED IN SWALES ALONG THE NORTH AND SOUTH PROPERTY LINE, WHICH WILL DRAIN TO THE ALLEY TO THE WEST. THE PEAK RUNOFF FROM THE PROPERTY UNDER DEVELOPED CONDITIONS IS 0.62 CFS DURING A 100-YEAR, 6-HOUR STORM.

FIRST FLUSH VOLUME = (0.42IN/12IN/FT) x ((0.163 x 0.68)) x 43,560SF/AC) = 168 CF REQUIRED.

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 (6-hr) (cu-ft)	V (24-hr) (acre-ft)	V (24-hr) (cu-ft)	
EXISTING CONDITIONS											
SITE	0.1630	0.00	38.00	38.00	24.00	1.25	0.02	742	0.02	785	0.50
TOTAL RUNOFF	0.16						0.02	742	0.02	785	0.50
FULL DEVELOPMENT CONDITIONS											
SITE	0.1630	0.00	16.00	16.00	68.00	1.88	0.03	1,111	0.03	1,231	0.62
TOTAL RUNOFF	0.16						0.03	1,111	0.03	1,231	0.62
EXCESS PRECIP.		0.62	0.8	1.03	2.33	E (in)					
PEAK DISCHARGE		1.71	2.36	3.05	4.34	Q _{pe} (cfs)					
							ZONE = 2				
WEIGHTED E (in) = (E _a)(%A) + (E _b)(%B) + (E _c)(%C) + (E _d)(%D)							P _{6HR} (in.) = 2.29				
V _{6HR} (acre-ft) = (WEIGHTED E)(AREA)/12							P _{24HR} (in.) = 2.59				
V _{24HR} (acre-ft) = V _{6HR} + (A _o)(P _{10DAY} - P _{6HR})/12							P _{10DAY} (in.) = 3.62				
Q (cfs) = (Q _{pe})(A _a) + (Q _{pe})(A _b) + (Q _{pe})(A _c) + (Q _{pe})(A _d)											



VICINITY MAP: K-16-Z

Tompson

E

ngineering

C

onsultants, Inc.

1200m@jrhoo.com

PHONE: (505) 271-2199

FAX: (505) 650-9246

PROJECT:

DATE:

HORIZ. SCALE:

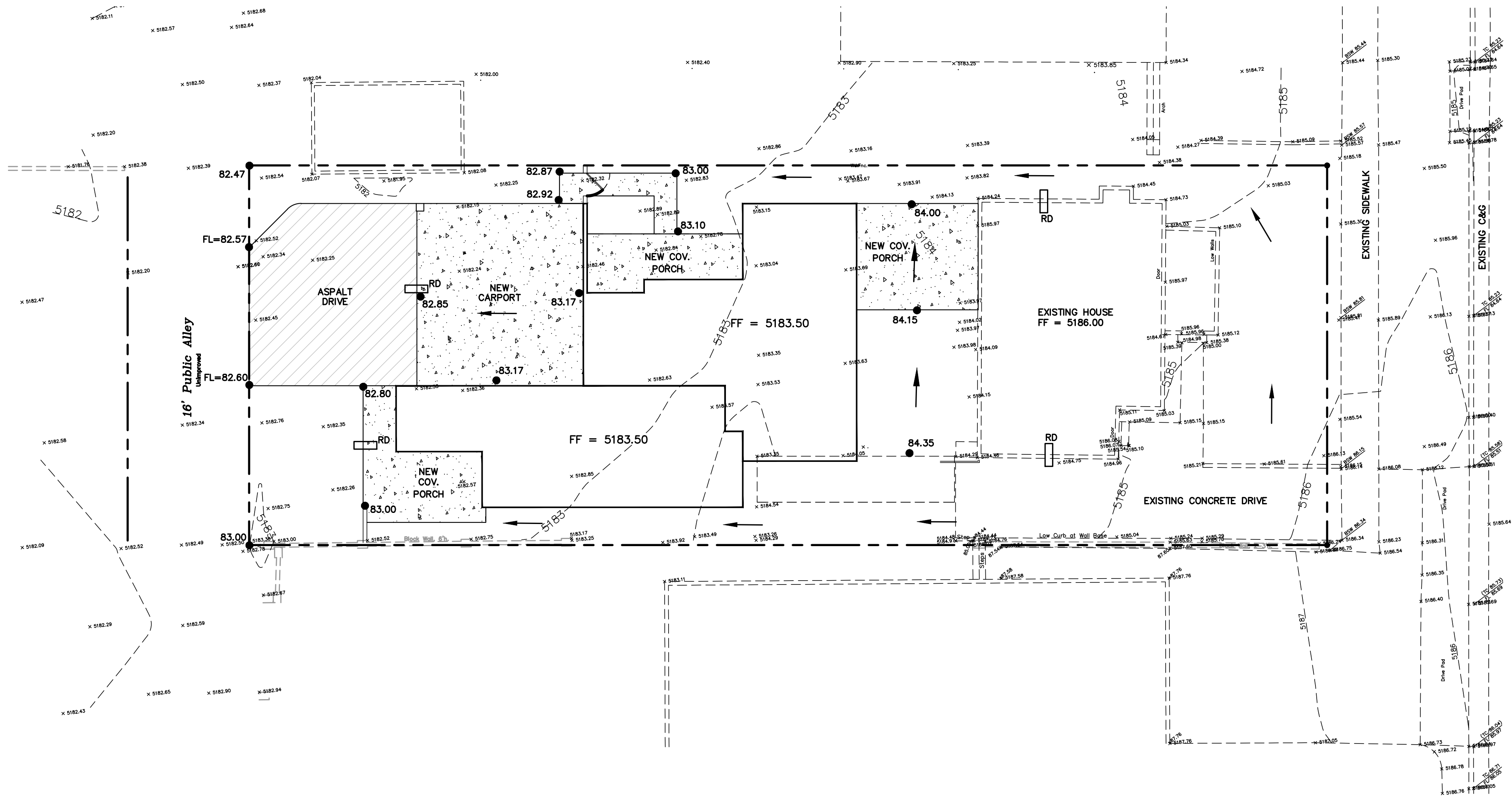
VERT. SCALE:

DRAWN BY: DEM

CHECKED BY:

APPROVED BY:

FILE:



Vassar Drive SE
Owned Roadway

City of Albuquerque

Planning Department

Development Review Services

HYDROLOGY SECTION

APPROVED

DATE: 11/01/21

BY: *Randy C. Branstetter*

HydroTeam # K16D092

THE APPROVAL OF THESE PLANS AND REPORT SHALL NOT BE

CONSIDERED TO PREVENT VIOLATIONS OF ANY CITY

ORDINANCES OR STATE LAWS, AND SHALL NOT PREVENT

THE CITY OF ALBUQUERQUE FROM ENFORCEMENT

CONNECTION, OR REPAIR OR IMPROVEMENT IN PLANS

OPERATIONS, OR CONSTRUCTION, IN SUCH APPROVED PLANS

SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT

AUTHORIZATION.

LEGEND

5184

EXISTING CONTOURS

5183.83

EXISTING SPOT ELEVATION

RD

ROOF DRAIN

83.00

PROPOSED SPOT ELEVATION

PROPERTY BOUNDARY

▨

PROPOSED ASPHALT PAVEMENT

▨

PROPOSED CONCRETE

10

5

0

5

10

SCALE: 1"=10'

407 VASSAR SE

ALBUQUERQUE, NEW MEXICO

GRADING AND DRAINAGE PLAN

CITY/COUNTY REVIEW		DATE
DEPARTMENT	SIGN-OFF	
WASTEWATER MGMT. DIV.		
WATER SERVICES		
SUBDIVISION ENG.		
STREETS		
TRAFFIC		