CITY OF ALBUQUERQUE

July 16, 2014

John Bolinger, P.E.
Smith Engineering
2201 San Pedro NE Suite 200
Albuquerque, New Mexico 87110

RE: **2117 ST Cyr St**
Grading and Drainage Plan
Engineers Stamp Date 5/28/14 (K15-D097)

Dear Mr. Bolinger,

Based upon the information provided in your submittal received 7/7/2014, the above referenced Grading and Drainage Plan cannot be approved for Grading Permit or Building permit until the following comments are addressed.

- An SO-19 is required for the placement of the sidewalk culvert. Therefore, the notes for an SO-19 should be placed on the plans. Also provide the hydrology department with two copies of the G&D plan.

If you have any questions please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Curtis Cherne, P.E.
Principal Engineer, Planning Department
Development and Review Services

RR/CC
C: File

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: 2117 St. C Yr. Building Permit #: _____ City Drainage #: K15/D097

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

Legal Description: _____

City Address: _____

Engineering Firm: Smith Engineering Contact: John Bolinger

Address: 2201 San Pedro NE Bldg. 4 Suite 200 87110

Phone#: 228-4944 Fax#: _____ E-mail: allen@smithengineering.pro

Owner: _____ Contact: _____

Address: _____

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

Architect: _____ Contact: _____

Address: _____

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

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: _____ Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

- X DRAINAGE REPORT
- X DRAINAGE PLAN 1st SUBMITTAL
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL G & D PLAN
- ____ GRADING PLAN
- ____ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ____ ENGINEER'S CERT (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEER'S CERT (TCL)
- ____ ENGINEER'S CERT (DRB SITE PLAN)
- ____ ENGINEER'S CERT (ESC)
- ____ SO-19
- ____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ____ SIA/FINANCIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D APPROVAL
- ____ S. DEV. FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM)
- ____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ____ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ GRADING CERTIFICATION
- ____ SO-19 APPROVAL
- ____ ESC PERMIT APPROVAL
- ____ ESC CERT. ACCEPTANCE
- ____ OTHER (SPECIFY)

RECEIVED
JAN 22 2014
LAND DEVELOPMENT SECTION

RECEIVED
JUN 18 2014
July 07 2014
LAND DEVELOPMENT SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED: ____ Yes ____ No ____ Copy Provided

DATE SUBMITTED: _____ By: _____

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

Rael, Rudy E.

From: J. Allen Bolinger <allenb@smithengineering.pro>
Sent: Monday, April 28, 2014 10:50 AM
To: Rael, Rudy E.
Subject: RE: 2117 ST Cyr St.

Hello Rudy: I have been working on the drainage issues with the site. I have finally got a drainage plan that work for the site with the layout the owner wants. **The site can only hold the 10 year storm volume.** With the proposed buildings and parking lot surface area there is no way the site can hold more than the 10 year storm volume. If the site must hold more than the 10 year storm volume thenI need to let the owner know she will have to modify what she is proposing.

Thanks Allen

-----Original Message-----
From: "Rael, Rudy E." <RRael@cabq.gov>
Sent: Tuesday, February 4, 2014 10:13am
To: allenb@smithengineering.pro
Subject: 2117 ST Cyr St.

Hello Allen, here is the letter for ST Cyr St.

Rudy E. Rael, CE
Engineer Assistant, Planning Dept.
Development & Review Services
600 2nd St. NW Suite 201
Albuquerque NM 87102
(505) 924-3977

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: 2117 St. C Yiz. Building Permit #: _____ City Drainage #: K15/D097

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

Legal Description: _____

City Address: _____

Engineering Firm: Smith Engineering Contact: John Bolinger

Address: 2201 San Pedro NE Bldg. 4 Suite 200 87110

Phone#: 228-4944 Fax#: _____ E-mail: allen@smithengineering.pro

Owner: _____ Contact: _____

Address: _____

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

Architect: _____ Contact: _____

Address: _____

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

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: _____ Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

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- ____ DRAINAGE PLAN RESUBMITTAL
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- ____ ENGINEER'S CERT (TCL)
- ____ ENGINEER'S CERT (DRB SITE PLAN)
- ____ ENGINEER'S CERT (ESC)
- ____ SO-19
- ____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

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- ____ ESC PERMIT APPROVAL
- ____ ESC CERT. ACCEPTANCE
- ____ OTHER (SPECIFY)

RECEIVED
JAN 22 2014
LAND DEVELOPMENT SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED: ____ Yes ____ No ____ Copy Provided

DATE SUBMITTED: _____ By: _____

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CITY OF ALBUQUERQUE

February 4, 2014

John Bolinger, P.E.
Smith Engineering
2201 San Pedro NE Bldg. 4 Suite 200
Albuquerque, New Mexico 87110

RE: **2117 St Cyr St. SE**
Grading and Drainage Plan
Engineers Stamp Date 1/10/14 (K15-D097)

Dear Mr. Bolinger,

Based upon the information provided in your submittal received 1/22/2014, the above referenced Grading and Drainage Plan cannot be approved for Building Permit until the following comments are addressed.

- The spread sheet with all calculations is missing. These calcs can be placed on the plan itself. Build notes are needed along with standard construction notes. A vicinity map is required. The bench mark needs to be provided.
- Is the drive pad existing, if not it should be built per city specifications. A water block should be provided at the entrance along with grades.
- How are flows leaving the site to the west of the buildings? Nuisance flows are not allowed to flow over public sidewalks. A swale should be provided to the west of the buildings along with a profile or section of the swale. If a sidewalk culvert is used provide a detail with notes.
- The FF is missing at the most northern building.
- All landscaping 10 feet away from buildings should be depressed to retain moisture which falls on them.
- Existing and proposed contours should be placed in and around the site along with flow line in ST Cyr.
- Show the property lines and all fences and or walls.
- Are the flows around the site being adversely affected? How is the alley being affected if at all?
- The north arrow is missing.
- Where is the location of the dumpster?

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Curtis Cherne, P.E.
Principal Engineer, Planning Department
Development and Review Services

RR/CC
C: File

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

Grading and Drainage Report

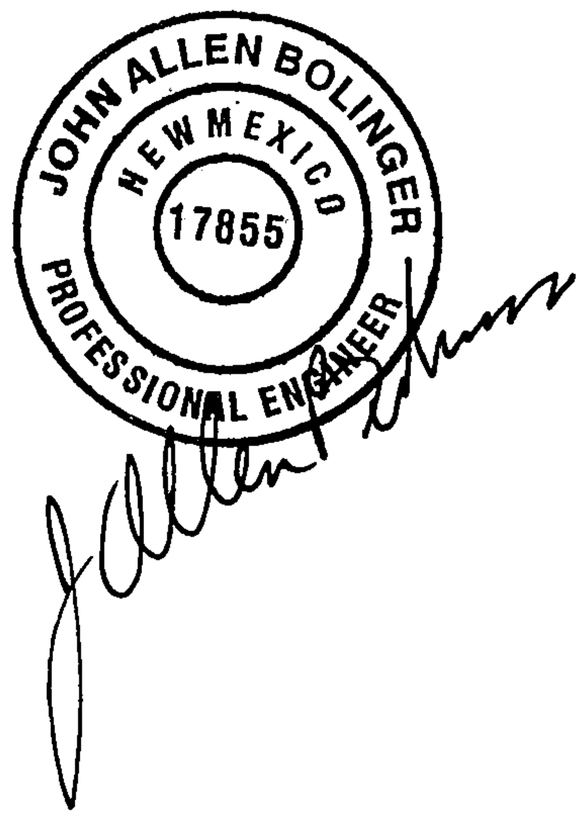
2117 St. Cyr Rd SE

Block 8, Lot 17

Vista Heights Subdivision,

Zone SU-2 DR

November 21, 2013



GENERAL

Smith Engineering has been retained to develop the drainage and grading plan for the apartment addition to 2117 St Cyr SE, Block 8, Lot 17, Vista Heights Subdivision, Zone SU-2 DR. The lot is 142-feet long and 50-feet wide with square footage of 7,100 (0.163 acres). The lot borders St Cyr Street on the south, the alley on the north and just north of the City of Albuquerque Bus Facility.

SITE LOCATION AND DISCRIPTION

The lot is located in Bernalillo County in the Southeast side of the City of Albuquerque, New Mexico. The local climate is considered semi-desert and is hot and dry. The lot is located on the east mesa between the University of New Mexico and the Albuquerque International Airport. Albuquerque generally receives about 8-inches of rain per year. The majority of floods that affect the area come from thunderstorms that occur in the months of July, August and September. The summer rain storms originate from the Gulf of Mexico. Less intense winter rainfall comes from frontal activity that originates in the Pacific Ocean.

HYDROLOGICAL ANALYSIS

The City of Albuquerque's Development Process Manual (DPM) Section 22.2 was used to compute the 100-year 6-hour peak flows and runoff volumes for the onsite basin. Precipitation Zone 2 along with Tables A-2, A-8 and A-9 were used for these calculations. The site is small enough to warrant one basin for analysis.

A. Existing Conditions

The site located in the Vista Heights subdivision, Block 8, Lot 16 with the following address 2117 St Cyr Road, SE. The lot has an existing house on the northwest corner of the lot with an approximate square footage of 763. The roof is pitched and drains to the west and east. There are two small sheds on the south property line. There is fencing on the east, north and west property lines. The lot is mainly compacted earth with a couple of trees and native grasses and weeds. The average slope of the existing grade is about 4.6% northeast to southwest. The Flood Insurance Rate Map (FIRM MAP NUMBER # 35001C0353, August 16, 2012 delineates an existing 100-year flood plain, **"Zone X: Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees form 1% annual chance flood".**

Land Treatments C and D were used to compute the existing conditions peak flow and run off. The results are summarized in the attached tables. The average 100-year peak flow is 0.541 cubic feet per second.

B. Developed Conditions

The developed project site to be constructed increases the area of Treatment Zone D and decreasing the Treatment Zone C. The new landscaped area with be xeriscaped with gravel, native bushes and scrubs and given a Treatment Zone C for analysis. The new apartments are 1080 square feet. The sidewalk is about 290 square feet. Pavement for the driveway and

parking is about 4,210 square feet and the landscaping is about 680 square feet. The runoff will flow off the buildings will flow to the landscape area and parking lot. The runoff will then sheet flow south off the parking lot to St Cyr. St Cyr slopes to the east to Yale Blvd SE. There are five lots between the site and Yale Blvd.

The following spread sheets show the hydrological analysis and calculations for the property. The existing runoff Q_{100} is 0.541 cfs and the developed runoff Q_{100} is 0.742 cfs. This is a 37% increase in runoff Q_{100}. The existing V_{100} is 0.202 ac-ft and the developed V_{100} is 0.33 ac-ft.