CITY OF ALBUQUERQUE



February 13, 2018

Mike Balaskovits, PE Bohannan Huston, Inc. 7500 Jefferson St NE Albuquerque, NM 87109

RE: Broadstone Highlands Hotel Block Conceptual Grading and Drainage Plan Engineer's Stamp Date: 2/12/18 Hydrology File: K15D034B

Dear Mr. Balaskovits:

Based on the information provided in the submittal received on 2/12/18 the abovereferenced Conceptual Grading and Drainage Plan is approved for Site Plan for Building Permit.

PO Box 1293 Prior to Building Permit a detailed Grading and Drainage Plan will be required. This plan will need to callout the two inlet replacements as private infrastructure (not public); additional comments can also be reasonably expected.

Albuquerque

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

NM 87103

Sincerely,

www.cabq.gov

Dana M. Peterson Senior Engineer, Planning Dept. Development Review Services

Bohannan 🛦 Huston

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

www.bhinc.com voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332

CLIENT/COURIER TRANSMITTAL

To: Dana Peterson Requested by: Michael Balaskovits City of Albuquerque Date: February 12, 2018 600 2nd St. NW Albuquerque, NM 87102 Time Due: This A.M. This P.M. Rush By Tomorrow Phone: (505) 924-3880 Job No.: 20160155 Job Name: **Highlands Hotel DELIVERY VIA PICK UP** \boxtimes **Federal Express** Courier Item: _____ UPS Mail Other

<u>ITEM NO.</u>	<u>QUANTITY</u>	DESCRIPTION					
1	1	Drainage Info Sheet					
2	1	Comment Response Letter					
3	1	Conceptual Grading & Drainage Plan					

COMMENTS / INSTRUCTIONS

Dana,

Please find attached the Conceptual Grading & Drainage plan for the Highlands Hotel. We are requesting Hydrology approval in support of Site Plan for Building Permit Approval. Let me if you have any questions.

Thanks, Mike

REC'D BY:_____

DATE:_____ TI

TIME:



City of Albuquerque

Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title:	Building Permit #:	City Drainage #:					
DRB#: EPC#:		Work Order#:					
Legal Description:							
City Address:							
Engineering Firm:		Contact:					
Address:							
Phone#: Fax#:		E-mail:					
Owner:		Contact:					
Address:							
Phone#: Fax#:		_ E-mail:					
Architect:		Contact:					
Address:							
Phone#: Fax#:		E-mail:					
Other Contact:		Contact:					
Address:							
Phone#: Fax#:		E-mail:					
TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTROL		BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY					
TYPE OF SUBMITTAL:							
ENGINEER/ ARCHITECT CERTIFICATION		RY PLAT APPROVAL					
		SITE PLAN FOR SUB'D APPROVAL SITE PLAN FOR BLDG. PERMIT APPROVAL					
CONCEPTUAL G & D PLAN		FINAL PLAT APPROVAL					
GRADING PLAN							
DRAINAGE MASTER PLAN	FOUNDATIO	FOUNDATION PERMIT APPROVAL					
DRAINAGE REPORT	GRADING P	GRADING PERMIT APPROVAL					
CLOMR/LOMR	SO-19 APPR	SO-19 APPROVAL					
TRAFFIC CIRCUITATION LAVOUT (TOL)		RMIT APPROVAL					
TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS)		GRADING/ PAD CERTIFICATION					
EROSION & SEDIMENT CONTROL PLAN (ESC)		WORK ORDER APPROVAL					
	CLOMR/LON	/IK					
OTHER (SPECIFY)	PRE-DESIGN	MEETING					
	OTHER (SPE	ECIFY)					
IS THIS A RESUBMITTAL?: Yes No							
DATE SUBMITTED:By: _							

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ____

Bohannan 🛦 Huston

February 12, 2018

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Mr. Dana M. Peterson, PE City of Albuquerque Planning Department 600 2nd Street NW Albuquerque, NM 87103

Re: Highlands Hotel / Hydrology File K15D034B

Dear Mr. Peterson:

Enclosed for your review and comment is a re-submittal of the Highlands Hotel Conceptual Grading & Drainage Plan. Please see the responses to your comments dated 02/12/18 below:

1. At the intersection of vacated Mulberry and the alley, provide a clearly defined waterblock, 1' high, to prevent flows from leaving Mulberry and flowing west down the alley.

Response: A water block will be provided at the intersection of Mulberry and the alley to prevent flows from heading west into the alley.

2. Clarify the work to be performed on the public and private storm drain at the intersection of vacated Mulberry and the alley. Currently there is a public manhole in the street and a public type-D inlet in the flowline. Will the manhole be replaced with a new inlet, with the street graded towards it? The new inlet does not appear to be placed where it will intercept flows.

Response: The existing public manhole and public type-D inlet along the flowline which are currently there today are intended to remain. The inlet will be replaced in the same location with a new type-D inlet.

3. Provide additional flowline elevations at the intersection of vacated Mulberry and Central. Is there anything here to keep flows from entering your site from Central? *Response:* Additional flowline elevations have been added along Mulberry and Central. No water block was provided with the construction of the returns with the ART project. The existing flow today heads north onto Mulberry.

Engineering **A**

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4. Provide a copy of the recorded easement for the 21" public storm drain passing under the hotel. The original recorded easement will also need to be turned into DRC-Construction Services (Madeline Carruthers, 4th floor, Plaza del Sol) prior to any DRB action.

Response: The 21" public storm drain easement has not yet been recorded due to previous discussions regarding the consolidation of the parcels and the 21" storm drain no longer accepting public drainage. The easement has been prepared and signed and if the project went away, the easement will then be recorded.

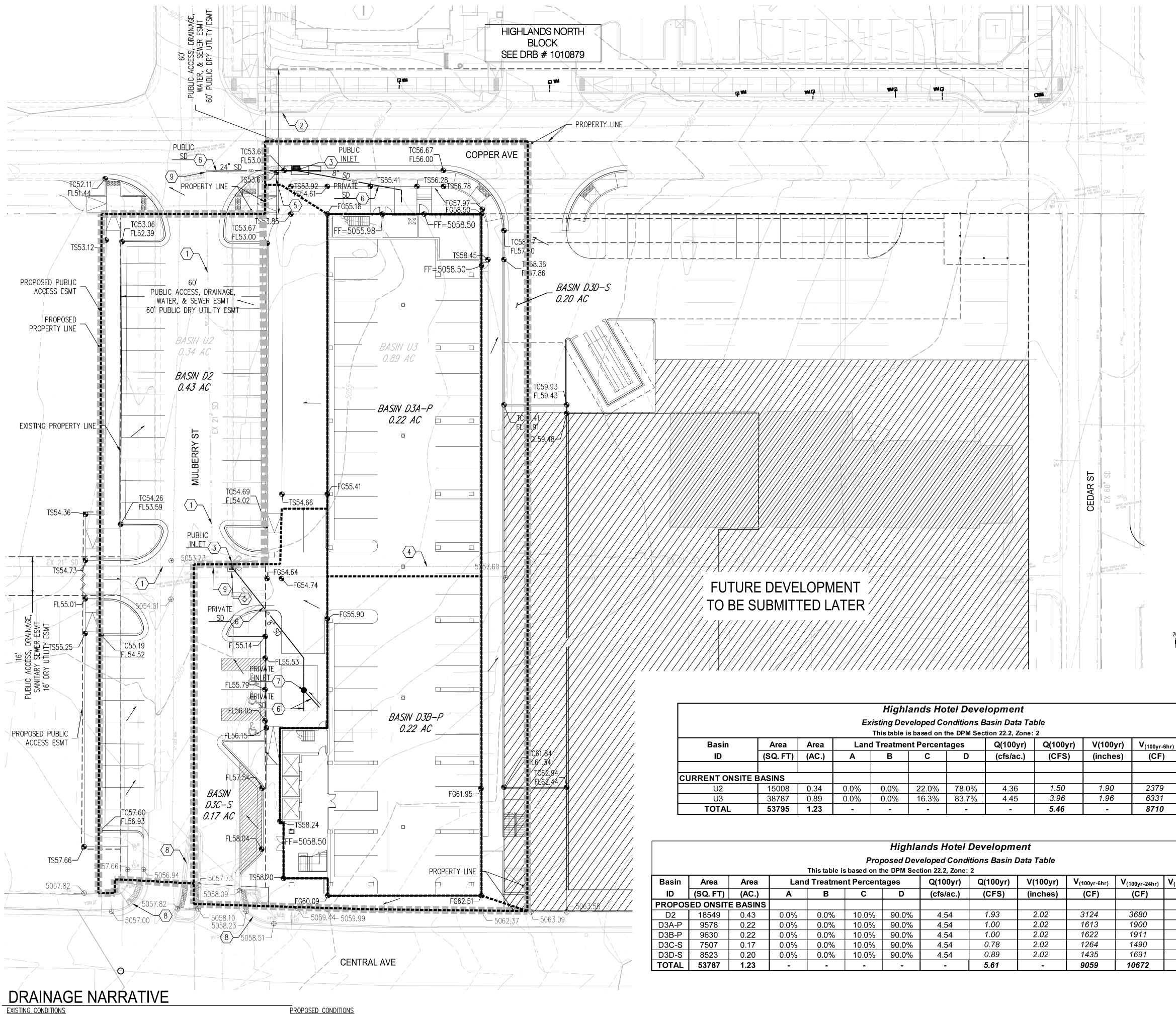
We are requesting Hydrology Approval in support of Site Plan for Building Permit approval. Please feel free to contact me at 823-1000 with questions or comments.

Sincerely, Mike Balaskovits, PE

Vice President Community Development and Planning

MJB/egn Enclosure

Engineering **A**



THIS SITE IS LOCATED AT THE NORTHEAST CORNER OF MULBERRY ST NE AND CENTRAL AVE NE. IT IS CURRENTLY DEVELOPED AND SLOPES FROM SOUTHEAST TO NORTHWEST. THE DRAINAGE ULTIMATELY OUTFALLS TO THE EXISTING PUBLIC STORM DRAIN SYSTEM LOCATED JUST WEST OFF THE SITE WITHIN MULBERRY. THIS SITE HAS HISTORICALLY BEEN FULLY DEVELOPED AS COMMERCIAL DEVELOPMENT.

THE SITE LIES WITHIN TWO EXISTING ONSITE BASINS, U2 & U3, BASIN U2 IS A PART OF A LARGER BASIN THAT SURFACE DRAINS TO AN INLET IN OAK ST. AND DRAINS TO A SYSTEM THAT ULTIMATELY HEADS WEST UNDERNEATH I-25. BASIN U3 IS ALSO A PART OF A LARGER BASIN THAT SURFACE DRAINS TO AN INLET IN COPPER AVE NORTH OF THIS SITE AND IS DISCHARGED INTO THE EXISTING 21" SD WITHIN MULBERRY ST.

THE TOTAL ONSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 5.46 CFS.

PROPOSED CONDITIONS

THE HIGHLANDS HOTEL WILL INCLUDE A NEW HOTEL THAT SITS AT THE NORTHEAST INTERSECTION OF CENTRAL AVE AND MULBERRY ST. ON STREET PARKING WILL BE PROVIDED AS A RESULT OF THIS PROJECT. TWO EXISTING STORM DRAIN INLETS WILL BE REMOVED AND LOCATED AS A RESULT OF NEW CURB AND GUTTER IMPROVEMENTS. THIS IMPERVIOUS AREA OF THE SITE WILL INCREASE TO 90% D AND 10% C FOR DEVELOPED FLOWS. LANDSCAPED AREAS THROUGHOUT THE SITE WILL BE DEPRESSED WHERE APPLICABLE TO CAPTURE DRAINAGE IN AN ATTEMPT TO MEET THE FIRST FLUSH REQUIREMENTS, HOWEVER, ULTIMATELY THE CLIENT HAS DECIDED TO PAY CASH-IN-LIEU FOR THE FIRST FLUSH REQUIREMENTS.

THE DEVELOPED BASINS WILL ADHERE TO THE HISTORIC FLOW WITH FEW EXCEPTIONS. THE FOLLOWING IS A DESCRIPTION OF HOW EACH BASIN WILL DRAIN. PLEASE REFER TO THE "PROPOSED DEVELOPED CONDITIONS BASIN DATA TABLE" FOR THE PROPOSED BASIN FLOWS.

FILE: P: \20160155 \CDP \Plans \General \20160155_GP01_SHS_SPBP.dwg USER: enewman DATE: Feb, 12 2018 TIME: 09:43 am

			Ех	cisting Dev	veloped Co	onditions E	lopment Basin Data Ta tion 22.2, Zone:				
Basin	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr)	Q(100yr)	V(100yr)	V _(100yr-6hr)	V _(100yr-24hr)
ID			Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)
CURRENT ONSIT	E BASINS										
U2	15008	0.34	0.0%	0.0%	22.0%	78.0%	4.36	1.50	1.90	2379	2769
U3	38787	0.89	0.0%	0.0%	16.3%	83.7%	4.45	3.96	1.96	6331	7413
TOTAL	53795	1.23	-	-	-	-	-	5.46	-	8710	10182

						Highla	nds Hotel	Developm	ent			
					Prop	posed Dev	eloped Cond	itions Basin [Data Table			
				This table is	s based on t	he DPM Sec	tion 22.2, Zone:	2				
Basin Ar	Area	Area	Land Treatment Percentages				Q(100yr)	Q(100yr)	V(100yr)	V _(100yr-6hr)	V _(100yr-24hr)	V _{(100yr-10da}
ID	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	(CF)
PROPOS	SED ONSITI	E BASINS										
D2	18549	0.43	0.0%	0.0%	10.0%	90.0%	4.54	1.93	2.02	3124	3680	5350
D3A-P	9578	0.22	0.0%	0.0%	10.0%	90.0%	4.54	1.00	2.02	1613	1900	2762
D3B-P	9630	0.22	0.0%	0.0%	10.0%	90.0%	4.54	1.00	2.02	1622	1911	2777
D3C-S	7507	0.17	0.0%	0.0%	10.0%	90.0%	4.54	0.78	2.02	1264	1490	2165
D3D-S	8523	0.20	0.0%	0.0%	10.0%	90.0%	4.54	0.89	2.02	1435	1691	2458
TOTAL	53787	1.23	-	-	-	-	-	5.61	-	9059	10672	15513

BASIN D2 INCLUDES A PORTIONS OF THE SITE'S PROPOSED PARKING IMPROVEMENTS AS WELL THE INLETS AT COPPER AVE AND OAK ST.

BASIN D3A-P INCLUDES ROOF DRAINAGE FROM THE HOTEL THAT WILL BE PIPED DIRECTLY INTO THE TOTAL ONSITE PROPOSED FLOW RATE FROM THE PROPOSED DEVELOPMENT IS THE COPPER AVE PROPOSED RELOCATED INLET WHICH ULTIMATELY TIES TO THE EXISTING 21" RCP LINE THAT RUNS IN MULBERRY ST.

BASIN D3B-P INCLUDES ROOF DRAINAGE FROM THE HOTEL THAT WILL BE PIPED INTO THE PROPOSED RELOCATED INLET WITHIN MULBERRY WHICH ULTIMATELY TIES TO THE EXISTING 21" RCP LINE WHICH RUNS IN MULBERRY ST AND WEST THROUGH THE EXISTING ALLEY.

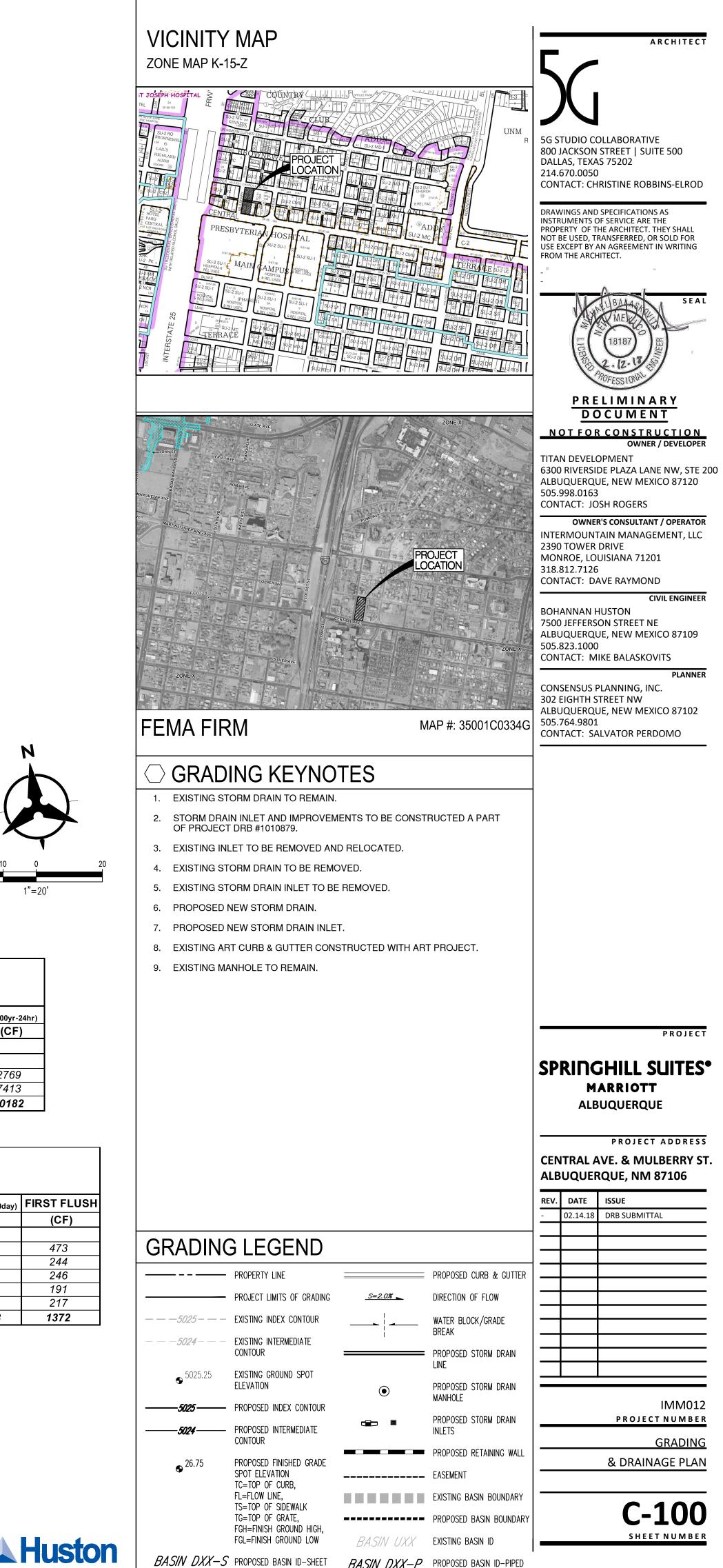
BASIN D3C-S INCLUDES A PORTION OF THE SITE'S HARDSCAPE, LANDSCAPE, PROPOSED PARKING IMPROVEMENTS, AS WELL AS A PORTION OF MULBERRY ST. THIS AREA CONTINUES TO SHEET FLOW TO THE PROPOSED RELOCATED INLET WITHIN MULBERRY ST.

BASIN D3D-S INCLUDES A PORTION OF THE SITE'S HARDSCAPE AND LANDSCAPING FEATURES AS EXISTING MULBERRY ST. THIS AREA CONTINUES TO SHEET FLOW TO COPPER AVE AND INTO WHICH WILL CONTINUE TO SHEET FLOW INTO THE PROPOSED RELOCATED INLET WITHIN COPPER AVF

> APPROXIMATELY 5.61 CFS. COMPARISON OF THE FLOW BETWEEN EXISTING AND PROPOSED CONDITIONS WAS FOUND TO HAVE AN OVERALL INCREASE OF 0.2 CFS, OVERALL INDICATING THAT THE HISTORICAL DEVELOPED FLOWS ARE CLOSE TO THE SITE'S PROPOSED DEVELOPED CONDITIONS. THESE MINOR ADJUSTMENTS DEMONSTRATE THAT THE DRAINAGE ELEMENTS PROPOSED WITH THE PROJECT ARE CAPABLE OF SAFELY CONVEYING THE 100 YR, 6 HR STORM EVENT IN ACCORDANCE WITH THE DEVELOPMENT PROCESS MANUAL. WITH THIS SUBMITTAL, WE ARE REQUESTING COA HYDROLOGY APPROVAL IN SUPPORT OF SITE PLAN FOR BUILDING PERMIT APPROVAL.



1"=20'



BASIN DXX-P PROPOSED BASIN ID-PIPED