# CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



November 30, 2018

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

RE: Broadstone Highlands Hotel Block- Springhill Suites Central and Mulberry NE

Grading and Drainage Plan
Engineer's Stamp Date: 11/28/18
Hydrology File: K15D034B

Dear Mr. Balaskovits:

PO Box 1293

Based on the submittal received on 11/28/18 the above-referenced Grading and Drainage Plan cannot be approved for Building Permit until the following are corrected:

### Prior to Building Permit:

Albuquerque

NM 87103

www.cabq.gov

1. This site does not qualify for a Waiver of Management Onsite. There is plenty of room to provide an underground structure far enough away from the building so that settlement will not be an issue. It should be relatively simple to capture nearly the entire stormwater quality volume (SWQV) before it enters the public stormdrain by placing an underground retention pond under vacated Mulberry or using cisterns for the roof runoff. Infiltration trenches can be added in select locations to capture runoff from the remaining paved areas. You are welcome to explain your justification for the Waiver of Management Onsite in more detail, but it will need include identification of either a public or private off-site management pond.

If the waiver requirements are met, then the City will not require Payment-in-Lieu since the site is in the MRA. But if the waiver requirements are not met then the developer will have to manage the SWQV onsite or he will be allowed Payment-in Lieu for any of the SWQV that he chooses to not manage. If requesting Payment-in-Lieu, the plan will need to state that the SWQV can be managed onsite, the owner doesn't wish to manage onsite, and the owner wants Payment-in-Lieu of Management Onsite.

2. If requesting a Waiver of Management Onsite, the following conditions of the new drainage ordinance (enacted 10/2/18) must be demonstrated on the plan (§ 14-5-2-6 (H)):

Show where stormwater quality can be effectively controlled through private offsite mitigation, or through an arrangement to utilize a cooperator's existing regional stormwater management infrastructure or facilities that are available to control stormwater quality.

## CITY OF ALBUQUERQUE

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And where one (or more) of the following is met:

- (i) the lot is too small to accommodate management on site while also accommodating the full plan of development;
- (ii) the soil is not stable;
- (iii) the site use is inconsistent with the capture and reuse of stormwater;
- (iv) other physical conditions exist where compliance with on-site stormwater quality control requirement leaves insufficient area;
- (v) public or private off-site facilities provide an opportunity to effectively accomplish the mitigation requirements of this ordinance;
- (vi) there is an opportunity to develop a project to replenish regional ground water supplies at an offsite location; or
- (vii) a waiver to state water law or acquisition of water rights would be required in order to implement management on site.

### Prior to Certificate of Occupancy (For Information):

PO Box 1293

- 3. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
- 4. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

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 A 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

November 28, 2018

Mr. Dana M. Peterson, PE City of Albuquerque Planning Department 600 2<sup>nd</sup> Street NW Albuquerque, NM 871

Re: Broadstone Highlands Hotel Block / Hydrology File K15D034B

Dear Mr. Peterson:

Enclosed for your review and comment is a re-submittal of the Highlands Hotel Grading & Drainage Plan. Please see the responses to your comments dated 06/27/18 below:

1. The private encroachment into the Copper public easement by the stem wall footer requires an encroachment agreement....

Response: The building was moved slightly to the south to remove the stem wall and footer out of the existing public easement. Drainage basins remained unchanged and the proposed conditions will continue to function as previously reviewed. Since this move was completed, an encroachment agreement is no longer necessary.

2. Payment of the fee in lieu for the first flush volume is required......

Response: Due to the infill nature of this project and the high density of the development we originally requested that the first flush requirement would be completed under the payment in lieu option. We understand that under the new Drainage Ordinance dated 9/17/2018, it is noted that this area is waived from the payement in lieu requirement. Landscape areas are depressed were applicable to account for some onsite ponding

3. The project requires and ESC plan.....

Response: Noted. An ESC plan has been submitted

We are requesting Hydrology Approval in support of Grading Permit approval, Building Permit and public work order 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

**Enclosure** 



# City of Albuquerque

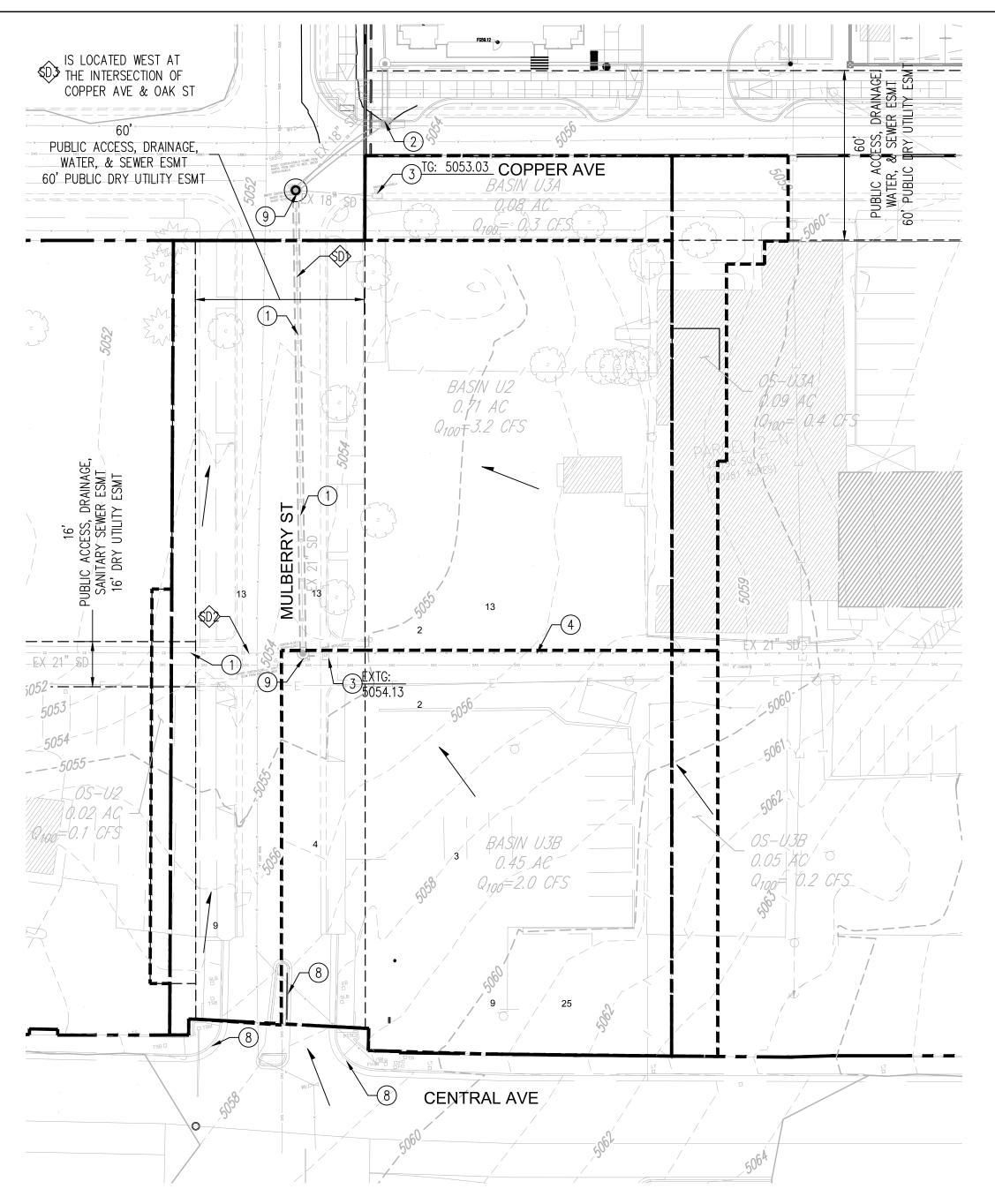
### Planning Department

### Development & Building Services Division

### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 3/2018)

Project Title: Highlands Hotel	Building Permit #:	Hydrology File #: K15D034B			
		Work Order#:			
Legal Description: TRACT 3-A THE HIGHLANDS	S				
City Address: N/A					
Applicant: BOHANNAN HUSTON, INC.		Contact: MIKE BALASKOVITS			
Address: 7500 JEFFERSON ST NE ALBUQUERQU	E, NM 87109				
Phone#: 505-823-1000	E-mail: MBALASKOVITS@BHINC.COM				
Other Contact: TITAN DEVELOPMENT CENTER I	_AND, LLC (OWNER)	Contact: JOSH ROGERS			
Address: 6300 RIVERSIDE PLAZA LANE NW #200					
	Fax#:	E-mail: JROGERS@TITAN-DEVELOPMENT.COM			
Check all that Apply:	IS TH	IIS A RESUBMITTAL?: X Yes No			
DEPARTMENT:					
× HYDROLOGY/ DRAINAGE	TVP	E OF APPROVAL/ACCEPTANCE SOUGHT:			
TRAFFIC/ TRANSPORTATION		BUILDING PERMIT APPROVAL			
		CERTIFICATE OF OCCUPANCY			
TYPE OF SUBMITTAL:		CERTIFICATE OF OCCUPANCE			
ENGINEER/ARCHITECT CERTIFICATION		DDELIMINIADV DI AT ADDDOVAI			
PAD CERTIFICATION		PRELIMINARY PLAT APPROVAL SITE PLAN FOR SUB'D APPROVAL			
CONCEPTUAL G & D PLAN					
X GRADING PLAN		SITE PLAN FOR BLDG. PERMIT APPROVAL			
DRAINAGE MASTER PLAN		FINAL PLAT APPROVAL			
DRAINAGE REPORT		OLA / DEL EA GE OF EDIANICIA I GUADANTEE			
FLOODPLAIN DEVELOPMENT PERMIT A	dille —	SIA/ RELEASE OF FINANCIAL GUARANTEE			
ELEVATION CERTIFICATE		FOUNDATION PERMIT APPROVAL			
CLOMR/LOMR		X GRADING PERMIT APPROVAL			
		SO-19 APPROVAL			
TRAFFIC CIRCULATION LAYOUT (TCL)	<del></del>	PAVING PERMIT APPROVAL			
TRAFFIC IMPACT STUDY (TIS)		GRADING/PAD CERTIFICATION			
		WORK ORDER APPROVAL			
OTHER (SPECIFY)	. —	CLOMR/LOMR			
PRE-DESIGN MEETING?		FLOODPLAIN DEVELOPMENT PERMIT			
		OTHER (SPECIFY)			
DATE SUBMITTED: 11/28/2018	By: Mike Balaskovits				
COA STAFF:	ELECTRONIC SUBMITTA	L RECEIVED:			

FEE PAID:\_\_\_\_



**EXISTING CONDITIONS** 

				Highl	ands Ho	tel Deve	lopment				
			Ex	risting Dev	veloped Co	nditions B	asin Data Ta	ble			
				This table i	s based on t	he DPM Sec	tion 22.2, Zone:	2			
Basin	Area	Area	Land	d Treatme	nt Percent	ages	Q(100yr)	Q(100yr)	V(100yr)	V <sub>(100yr-6hr)</sub>	V <sub>(100yr-24hr)</sub>
ID	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)
<b>CURRENT ONSITE</b>	BASINS										
U2	30848	0.71	0.0%	0.0%	15.0%	85.0%	4.47	3.16	1.97	5068	5942
U3A	3267	0.08	0.0%	0.0%	15.0%	85.0%	4.47	0.33	1.97	537	629
U3B	19680	0.45	0.0%	0.0%	15.0%	85.0%	4.47	2.02	1.97	3233	3791
TOTAL	53795	1.23	-	-	-	-	-	5.52	-	8838	10362
CURRENT OFFSITE	BASINS										
OS-U2	978	0.02	0.0%	0.0%	0.0%	100.0%	4.70	0.11	2.12	173	205
OS-U3A	3943	0.09	0.0%	0.0%	20.0%	80.0%	4.39	0.40	1.92	632	737
OS-U3B	2341	0.05	0.0%	0.0%	20.0%	80.0%	4.39	0.24	1.92	375	437
TOTAL	7262	0.17	-	-	-	-	-	0.74	-	1179	1379

						Highland	is Hotel De	evelopmen	t				
					Propos	sed Develo	ped Conditio	ns Basin Dat	a Table				
				This table is	s based on t	he DPM Sect	tion 22.2, Zone:	2					
Basin	Area	Area	Land	d Treatme	nt Percent	ages	Q(100yr)	Q(100yr)	V(100yr)	$V_{(100  ext{yr-6hr})}$	V <sub>(100yr-24hr)</sub>	V <sub>(100yr-10day)</sub>	FIRST FLUS
ID	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	(CF)	(CF)
PROPOSE	D ONSITE B	ASINS											
D2	18549	0.43	0.0%	0.0%	10.0%	90.0%	4.54	1.93	2.02	3124	3680	5350	473
D3A-P	9578	0.22	0.0%	0.0%	0.0%	100.0%	4.70	1.03	2.12	1692	2011	2969	271
D3A-S	7618	0.17	0.0%	0.0%	10.0%	90.0%	4.54	0.79	2.02	1283	1512	2197	194
D3B-P	10302	0.24	0.0%	0.0%	0.0%	100.0%	4.70	1.11	2.12	1820	2163	3194	292
D3B-S	7748	0.18	0.0%	0.0%	10.0%	90.0%	4.54	0.81	2.02	1305	1537	2235	198
TOTAL	53795	1.23	-	-	-	-	-	5.68	-	9224	10904	15944	1428
PROPOSE	_  D OFFSITE E	BASINS											
OS-D2	978	0.02	0.0%	0.0%	0.0%	100.0%	4.70	0.11	2.12	173	205	303	28
OS-D3A	5455	0.13	0.0%	0.0%	10.0%	90.0%	4.54	0.57	2.02	919	1082	1573	139
OS-D3B	829	0.02	0.0%	0.0%	10.0%	90.0%	4.54	0.09	2.02	140	164	239	21
TOTAL	7262	0.17	-	-	-	-	-	0.76	-	1231	1452	2116	188

	STORM DRAIN ANALYSIS POINT COMPARISON						
AP ID	Pipe Size	Existing Contributing Basins	Proposed Contributing Basins	Project Existing Conditions Q(100yr) (CFS)	Project Proposed Conditions Q(100yr) (CFS)	Difference from Existing Conditions to Proposed Conditions Q(100yr) (CFS)	
SD1	21"	U3A, OS-U3A	D3A-P, D3A-S, OS-D3A	0.73	2.40	+1.67	
SD2	21"	U3B, OS-U3B	SD1, D3B-P, D3B-S, OS-D3B	2.99	4.40	+1.41	
SD3 (IN OAK ST)	24"	U2, OS-U2	D2, OS-D2	3.27	2.04	-1.23	
NOTE: '+' indicate	NOTE: '+' indicates an increase in Q from existing to proposed. '-' indicates a decrease in Q from existing to proposed. In the event the proposed						

increase of flow in SD2 (1.41 CFS) were to exceed the existing capacity of the pipe, the flow would continue to SD3 which occurs today.

BLOCK SEE HYDROLOGY IS LOCATED WEST AT FILE **♥D≯** THE INTERSECTION OF # K15D034A COPPER AVE & OAK ST PUBLIC ACCESS, DRAINAGE, WATER, & SEWER ESMT 60' PUBLIC DRY UTILITY ESMT Q<sub>100</sub> = 0.6 CFS 0.43 AC PUBLIC 0.24 AC ACCESS ESMT — 0.02 AC Q<sub>100</sub>=0.1 CFS / BASIN D38-S Q<sub>100</sub>=1.8 CFS CENTRAL AVE 8

PROPOSED CONDITIONS

# DRAINAGE NARRATIVE

EXISTING CONDITIONS

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 WEST OF THE SITE, UNDER I-25. 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 NORTH IN MULBERRY ST TO COPPER AVE AND WEST TO AN INLET IN OAK ST. THIS STORM DRAIN SYSTEM ULTIMATELY HEADS WEST UNDERNEATH I-25. BASIN U3 IS ALSO A PART OF A LARGER BASIN THAT SURFACE DRAINS TO AN EXISTING 21" STORM DRAIN SYSTEM LOCATED WITHIN THE ALLEY WEST OF THE SITE. PORTIONS OF THIS BASIN DRAIN TO THE NORTH INTO AN EXISTING TYPE 'C' INLET IN COPPER AVENUE AND WEST INTO AN EXISTING MODIFIED TYPE 'D' INLET AT THE INTERSECTION OF THE ALLEY AND MULBERRY STREET DISCHARGE INTO THIS SYSTEM.

THE ONSITE BASINS HAVE BEEN DELINEATED WITHIN THE PROPERTY LINE AND THE OFFSITE BASINS ARE PROPOSED IMPROVEMENTS OUTSIDE OF THE PROPERTY LINE, BUT ARE ULTIMATELY A PART OF THE EXISTING BASINS U2 & U3.

THE TOTAL ONSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 5.5 CFS. THE TOTAL OFFSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 0.7 CFS.

PROPOSED CONDITIONS

THE DEVELOPMENT 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 RELOCATED AS A RESULT OF NEW CURB AND GUTTER IMPROVEMENTS AND GRADING. THIS IMPERVIOUS AREA OF THE SITE WILL INCREASE SLIGHTLY OVER THE HISTORIC CONDITIONS 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.

DEVELOPED BASINS

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

BASIN D2 INCLUDES A PORTION OF THE SITE'S PROPOSED PARKING IMPROVEMENTS AS WELL AS MULBERRY ST. THIS AREA WILL CONTINUE TO SHEET FLOW TO COPPER AVE HEADING WEST INTO THE INLETS AT COPPER AVE AND OAK ST.

<u>OFFSITE BASIN OS-D2</u> INCLUDES A PORTION OF SITE'S PROPOSED SIDEWALK TO THE WEST OF MULBERRY ST. THIS SIDEWALK HAS BEEN GRANTED A PUBLIC ACCESS EASEMENT AND WILL SHEET FLOW INTO MULBERRY ST AND CONTINUE TO THE INLET AT OAK ST.

<u>BASIN D3A-P</u> INCLUDES ROOF DRAINAGE FROM THE HOTEL THAT WILL BE PIPED DIRECTLY INTO THE COPPER AVE PROPOSED RELOCATED INLET WHICH ULTIMATELY TIES TO THE EXISTING 21" RCP LINE THAT RUNS IN MULBERRY ST.

<u>BASIN D3A-S</u> INCLUDES A PORTION OF THE SITE'S EASTERN HARDSCAPE AND LANDSCAPING FEATURES WHICH WILL CONTINUE TO SHEET FLOW INTO THE PROPOSED RELOCATED INLET WITHIN COPPER AVE AND INTO A PROPOSED PRIVATE INLET ONSITE.

OFFSITE BASIN OS—D3A INCLUDES A PORTION OF THE SITE'S ENTRANCE, TRASH ENCLOSURE, & HARDSCAPE BETWEEN THE PROPOSED DEVELOPMENT TO THE EAST. THIS AREA WILL SHEET FLOW TO A PROPOSED PRIVATE INLET ONSITE. THIS PROPOSED PRIVATE INLET COULD BE UTILIZED TO CAPTURE DRAINAGE FROM THE ADJACENT PARCEL IN THE FUTURE AS IT CURRENTLY DRAINS TO THE SAME DISCHARGE POINT. A SMALL PORTION OF DRAINAGE WILL CONTINUE TO SHEET FLOW INTO COPPER AVE AND COLLECTED WITH THE PROPOSED RELOCATED INLET (THE DUMPSTER ENCLOSURE WILL HAVE A SEPARATE DRAIN THAT CONNECTS TO THE SANITARY SEWER SERVICE).

<u>BASIN D3B-P</u> 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 THAT RUNS WEST THROUGH THE EXISTING ALLEY.

<u>BASIN D3B-S</u> 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.

<u>OFFSITE BASIN OS-D3B</u> INCLUDES PROPOSED HARDSCAPE AREA OFF OF THE CENTRAL SIDEWALK AND WILL DRAIN TOWARDS CENTRAL AVE WHICH ULTIMATELY DISCHARGES INTO MULBERRY ST & INTO THE PROPOSED RELOCATED TYPE 'D' INLET.

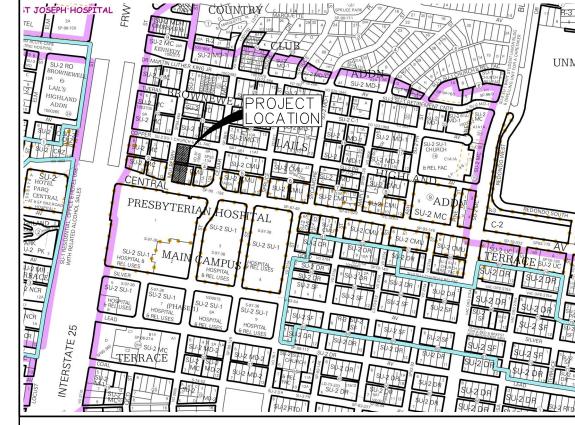
THE TOTAL ONSITE PROPOSED FLOW RATE FROM THE PROPOSED DEVELOPMENT IS APPROXIMATELY 5.7 CFS. COMPARISON OF THE FLOW BETWEEN EXISTING AND PROPOSED CONDITIONS WAS FOUND TO HAVE AN OVERALL INCREASE OF 0.2 CFS, INDICATING THAT THE DEVELOPED FLOWS HAVE INCREASED THE PROPOSED DEVELOPED FLOWS BY LESS THAN 2%.

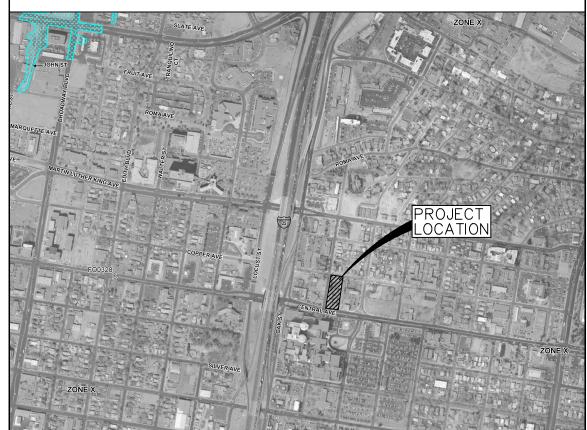
TO ACCOUNT FOR THE OFFSITE DRAINAGE FROM THE PARCEL TO THE EAST IN THE INTERIM CONDITION (PRIOR TO DEVELOPMENT OF THIS SITE), THE SITE WILL BE GRADED TO DRAIN TO THE NORTH AS IT DOES HISTORICALLY TODAY TO AVOID IMPACT ON THE HOTEL SITE. A SEPARATE GRADING AND DRAINAGE PLAN WILL BE PROVIDED IN THE FUTURE.

<u>CONCLUSION</u>

THE DEVELOPED FLOWS FOR THIS SITE GENERALLY REMAINS UNCHANGED FROM THE EXISTING CONDITIONS, HOWEVER THIS PLAN DIVERTS FLOWS DIRECTLY INTO THE RELOCATED INLETS FROM THE PROPOSED BUILDING. THESE ADJUSTMENTS ARE NOTED ON THE "STORM DRAIN ANALYSIS POINT COMPARISON" TABLE WHICH 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 BUILDING PERMIT APPROVAL AND WORK ORDER APPROVAL.

# VICINITY MAP ZONE MAP K-15-Z





FEMA FIRM

MAP #: 35001C0334G

ARCHITECT

1217 Main Street Dallas, TX 75202

LANDSCAPE Heads Up Landscaping 7525 Second Street NW

Plano, TX 75075

Dallas, TX 75207

Monroe, LA 71201

Titan Development

OPERATOR

2390 Tower Drive Monroe, Louisiana 71201 (318-812-7126 Dave Raymond)

IRC, L.L.C.

MEP ENGINEER

918 Dragon Street, Suite 500

(214-915-0929 Mark Portnoy)
INTERIOR DESIGNER

2360 Tower Drive, Suite 101

OWNER/DEVELOPER

Intermoutain Management, LLC

(318-812-7706 Colby Weaver Walker)

6300 Riverside Plaza Lane NW, Ste 200 Albuquerque, New Mexico 87120 (505-998-0163 Josh Rogers)

Albuquerque, New Mexico 87107 (505-898-9615 John Braly)

400 Chisholm Place, Suite 106

(214-501-3354 Mohammad Kabir)

MEP Systems Design & Engineering, Inc.

STRUCTURAL ENGINEER
MK Engineers and Associates, Inc

CIVIL ENGINEER
Bohannan Huston
7500 Jefferson Street NE
Albuquerque, New Mexico 87109
(505-823-1000 Mike Balaskovits)

5G Studio Collaborative, LLC..

(214-670-0050 Christine Robbins-Elrod)

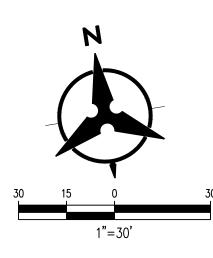
### ○ KEYNOTES

- EXISTING STORM DRAIN TO REMAIN.
- 2. STORM DRAIN INLET AND IMPROVEMENTS TO BE CONSTRUCTED AS A PART OF PROJECT DRB #1010879 / CPN # 764782.
- 3. EXISTING INLET TO BE REMOVED AND RELOCATED.
- 4. EXISTING STORM DRAIN TO BE REMOVED.
- 5. EXISTING STORM DRAIN INLET TO BE REMOVED.
- 6. PROPOSED NEW STORM DRAIN.7. PROPOSED NEW STORM DRAIN INLET.
- 8. EXISTING ART CURB & GUTTER CONSTRUCTED WITH ART PROJECT.
- 9. MANHOLE TO BE CONSTRUCTED AS A PART OF PROJECT DRB # 1010879 / CPN # 764782.
- 10. PROPOSED NEW STORM DRAIN MANHOLE.

# **GRADING LEGEND**

PROPERTY LINE

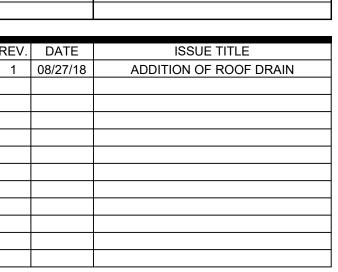
	PROJECT LIMITS OF GRADING	<u>S=2.0%</u>	DIRECTION OF FLOW
	EXISTING INDEX CONTOUR		WATER BLOCK/GRADE BREAK
	EXISTING INTERMEDIATE CONTOUR		PROPOSED STORM DRAIN LINE
5025.25	EXISTING GROUND SPOT ELEVATION	•	PROPOSED STORM DRAIN MANHOLE
<i>5025</i>	PROPOSED INDEX CONTOUR		
5024	PROPOSED INTERMEDIATE CONTOUR		PROPOSED STORM DRAIN INLETS
06.75	PROPOSED FINISHED GRADE		PROPOSED RETAINING WAL
<b>◆</b> <sup>26.75</sup>	SPOT ELEVATION TC=TOP OF CURB,		EASEMENT
	FL=FLOW LINE, TS=TOP OF SIDEWALK		EXISTING BASIN BOUNDARY
	TG=TOP OF SIDEWALK TG=TOP OF GRATE, FGH=FINISH GROUND HIGH,		PROPOSED BASIN BOUNDA
	FGL=FINISH GROUND LOW	BASIN UXX	EXISTING BASIN ID
BASIN DXX-S	PROPOSED BASIN ID-SHEET FLOW	BASIN DXX-P	PROPOSED BASIN ID-PIPE



PROPOSED CURB & GUTTER



DATE	ISSUE TITLE
01/12/18	ISSUE FOR DESIGN DEVELOPMENT
04/23/18	ISSUE FOR PERMIT
06/08/18	ISSUE FOR MARRIOTT'S 90% SET
FV DATE	ISSUE TITLE





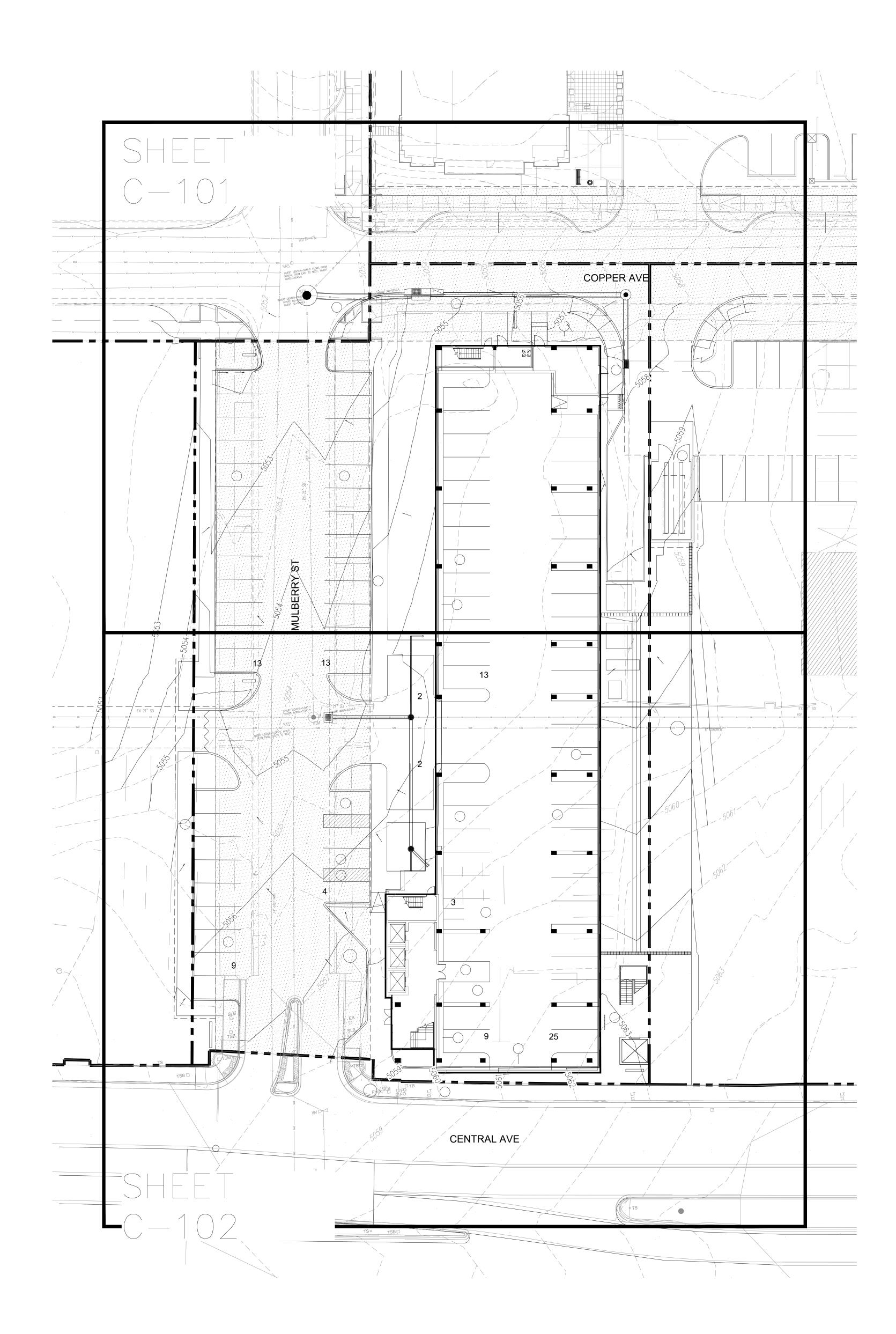
NOT FOR CONSTRUCTION

SPRINGHILL SUITES - ALBUQUERQUE CENTRAL AVE. & MULBERRY ST. ALBUQUERQUE, NM 87106

DRAINAGE

MANAGEMENT PLAN

C-O(



NOTE: NO WORK SHALL BE PERFORMED IN THE PUBLIC

ROW AND PUBLIC EASEMENTS WITHOUT AN

APPROVED PUBLIC WORK

ORDER.

NOTE: ALL WORK SHOWN IN THE R/W AND PUBLIC EASEMENTS SHALL BE CONSTRUCTED PER COA PUBLIC WORK ORDER CPN #764783. GRADES SHOWN WITHIN THE R/W AND PUBLIC EASEMENTS ARE FOR REFERENCE ONLY. IF PROPOSED GRADES IN R/W DIFFER FROM ON-SITE GRADES SHOWN, CONTACT ENGINEER IMMEDIATELY.



SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, COA PUBLIC WORKS STANDARDS SHALL APPLY.

STORM WATER DISCHARGE.

3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.

5. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO

6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE

7. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE

DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT

DISTURBANCE, EXCAVATION PERMITS, DRIVEWAY PERMITS, ETC.).

11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE TRAFFIC ENGINEERING DEPARTMENT PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.

12. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL

SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER

14. THE PROJECT MUST CONFORM WITH THE EROSION AND SEDIMENT REQUIREMENTS OF THE 2003 EPA CONSTRUCTION GENERAL PERMIT OR LOCAL

### **GRADING SHEET NOTES**

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN. 2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL

4. EARTH SLOPES SHALL NOT EXCEED 5 HORIZONTAL TO 1 VERTICAL PER THE GEOTECHNICAL REPORT UNLESS SHOWN OTHERWISE.

THE COA STANDARD SPECIFICATIONS FOR PUBLIC WORKS.

5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK/DISTURBANCE OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.

PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.

THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS. 10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT

2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS. RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO

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4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR

ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.

CONSTRUCTION OBSERVER.

CONTRACTOR'S EXPENSE.

8. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT

STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY. 9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL

10. ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.

DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.

13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.

STANDARDS & CODES WHICHEVER IS MORE STRINGENT.

MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.

3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT (FIRST PRIORITY) SPECIFICATIONS, AND/OR

6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.

7. A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE

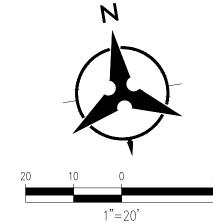
8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN

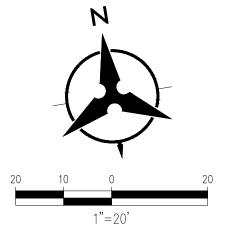
9. ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN

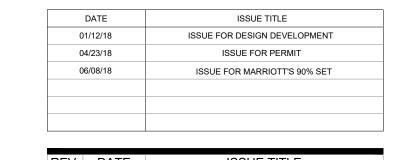
11. SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%

12. HDPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

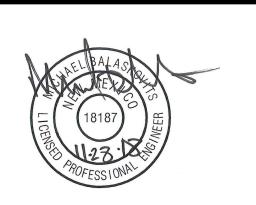
**Bohannan** A Huston



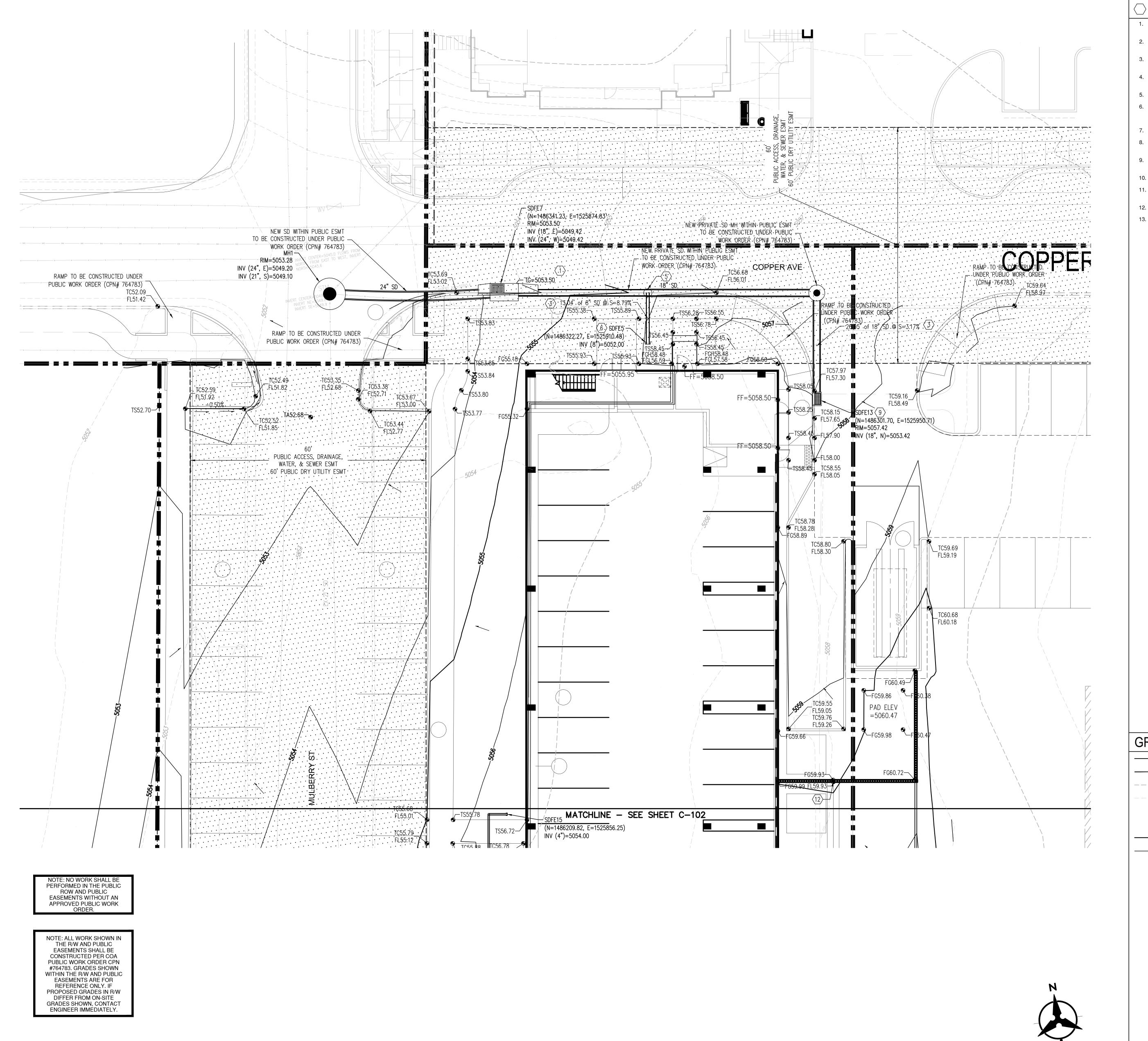




REV.	DATE	ISSUE TITLE
1	06/18/18	CITY PERMIT REVIEW
2	08/27/18	CITY PERMIT REVIEW
3	08/31/18	ISSUE FOR CONSTRUCTION



SPRINGHILL SUITES - ALBUQUERQUE CENTRAL AVE. & MULBERRY ST ALBUQUERQUE, NW-87,106 **OVERALL GRADING &** DRAINAGE PLAN



## □ GRADING KEYNOTES

- PUBLIC SINGLE GRATE TYPE 'A' INLET. SEE PUBLIC WORK ORDER (CPN # 764783). GRATE ELEVATION FOR REFERENCE ONLY.
- 2. PUBLIC TYPE 'D' INLET. SEE PUBLIC WORK ORDER (CPN #764783). GRATE ELEVATION FOR REFERENCE ONLY.
- 3. INSTALL HDPE (N12WT, OR APPROVED EQUAL) STORM DRAIN PIPE (SIZE PER PLAN).
  - 4. INSTALL 18" NYLOPLAST STORM DRAIN INLET OR APPROVED EQUAL PER
- MANUFACTURER'S SPECIFICATIONS.
- 5. INSTALL PRE-FABRICATED STORM DRAIN FITTING.
- 6. STUB PROPOSED ROOF DRAIN CONNECTIONS WITHIN 5' OF THE BUILDING. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO PROVIDE APPROPRIATE FITTINGS.
- REMOVE EXISTING STORM DRAIN.
- 8. EXISTING STORM DRAIN INLET TO BE REMOVED. SEE PUBLIC WORK ORDER (CPN # 764783).
- INSTALL 18" 2'X3' NYLOPLAST STORM DRAIN TRAFFIC RATED INLET OR APPROVED EQUAL PER MANUFACTURER'S SPECIFICATIONS.
- 10. INSTALL MEDIAN CURB & GUTTER PER COA STD. DWG. 2415B.
- 11. INSTALL HDPE (N12WT, OR APPROVED EQUAL) STORM DRAIN REDUCER FITTING (SIZE PER PLAN).
- 12. INSTALL 6" PVC GROUTED THROUGH WALL AT ELEVATION.
- 13. INSTALL 30" NYLOPLAST DRAIN BASIN AND SOLID H-20 GRATE (OR APPROVED EQUAL) PER MANUFACTURER'S SPECIFICATIONS.

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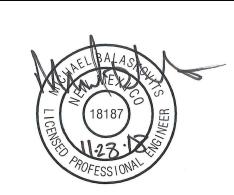
## GRADING LEGEND

GRADING	GRADING LEGEND					
	PROPERTY LINE		PROPOSED CURB & GUTTER			
	PROJECT LIMITS OF GRADING	S=2.0%	DIRECTION OF FLOW			
	EXISTING INDEX CONTOUR		WATER BLOCK/GRADE BREAK			
	EXISTING INTERMEDIATE CONTOUR		PROPOSED STORM DRAIN LINE			
<b>→</b> 5025.25	EXISTING GROUND SPOT ELEVATION	•	PROPOSED STORM DRAIN MANHOLE			
5025	PROPOSED INDEX CONTOUR					
5024	PROPOSED INTERMEDIATE CONTOUR		PROPOSED STORM DRAIN INLETS			
00.75	DDODOCED FINICHED ODADE		PROPOSED RETAINING WALL			
€ 26.75	PROPOSED FINISHED GRADE SPOT ELEVATION TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW		EASEMENT			

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DATE	ISSUE TITLE		
01/12/18	ISSUE FOR DESIGN DEVELOPMENT		
04/23/18	ISSUE FOR PERMIT		
06/08/18	ISSUE FOR MARRIOTT'S 90% SET		
REV. DATE	ISSUE TITLE		

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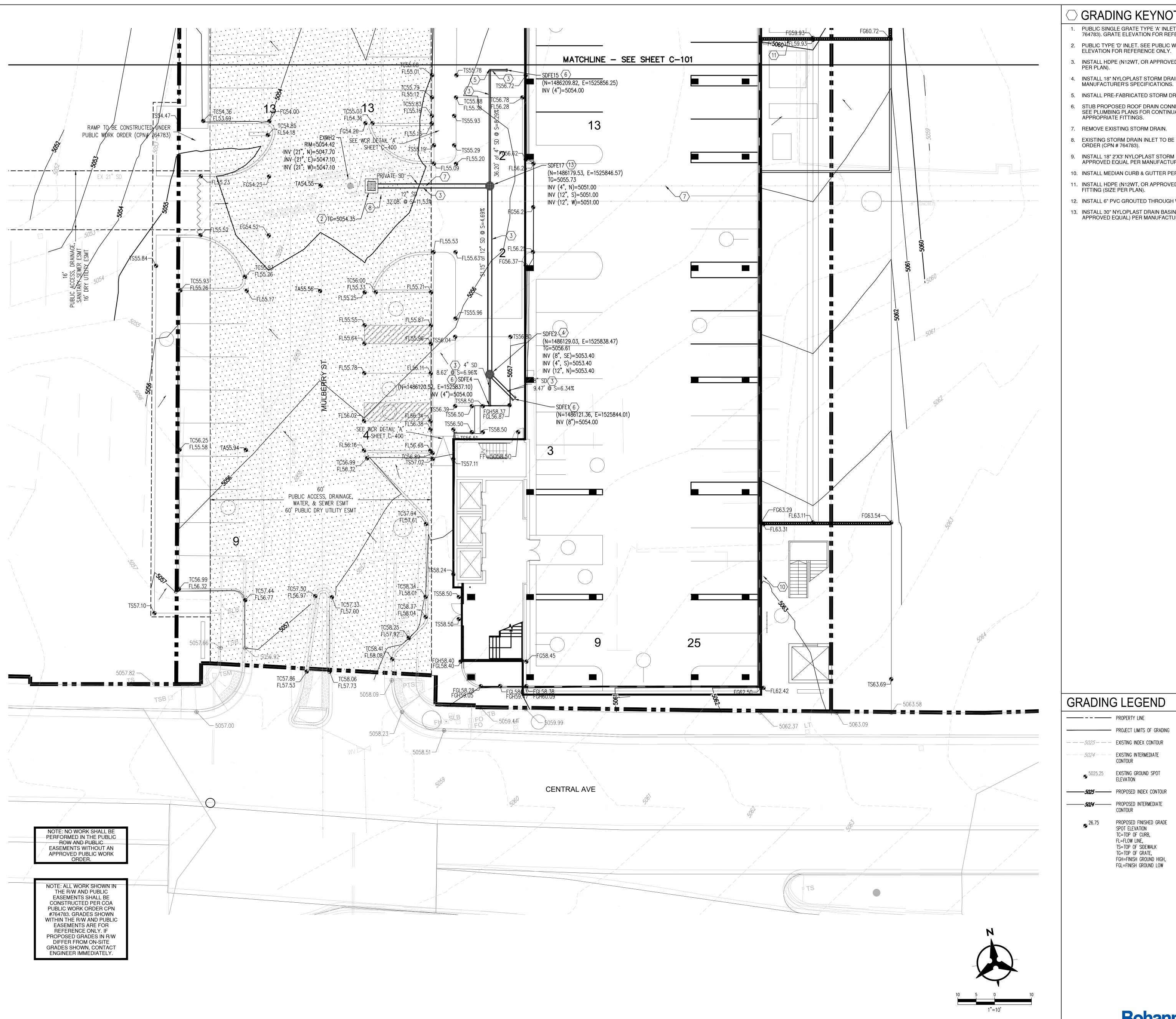


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GRADING & DRAINAGE PLAN

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**GRADING &** DRAINAGE PLAN