## CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



May 26, 2020

Fred C. Arfman, P.E. Isaacson & Arfman, P.A. 128 Monroe St. N.E Albuquerque, NM 87108

RE: Balloon Fiesta Golf & Event Center Tuffshed Addition

9401 Balloon Museum Drive NE Grading and Drainage Plan Engineer's Stamp Date: 05/19/20 Hydrology File: B17D001D

Dear Mr. Arfman:

PO Box 1293 Based upon the information provided in your submittal received 05/20/2020, the Grading &

Drainage Plan is approved for Building Permit.

Albuquerque 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.

NM 87103

As a reminder, 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.

If you have any questions, please contact me at 924-3995 or <a href="mailto:rbrissette@cabq.gov">rbrissette@cabq.gov</a>.

Renée C. Brissette

www.cabq.gov

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology

Planning Department



Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

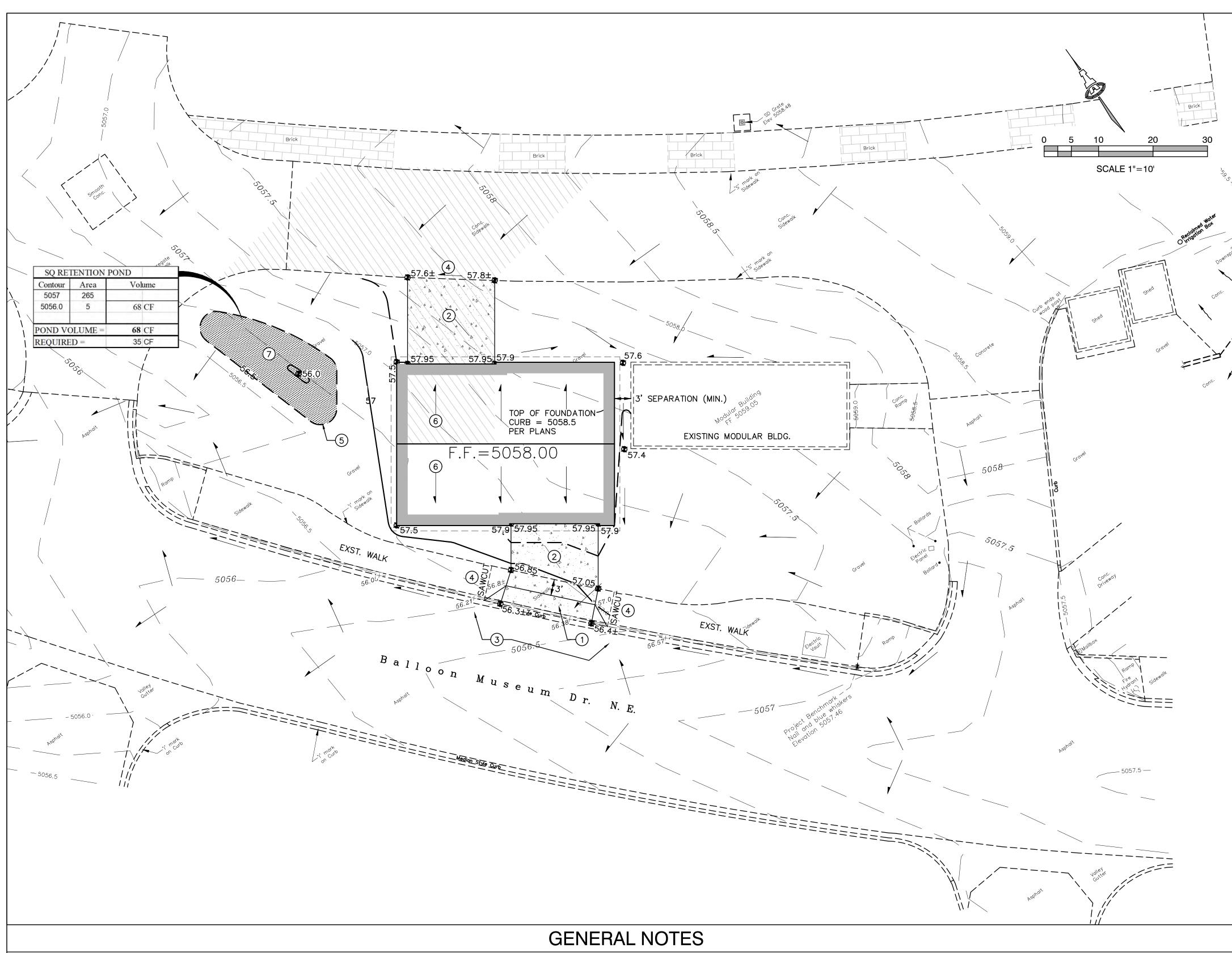
CITY OF ALBUQUERQUE PROJECT

COA STAFF:

Balloon Fiesta Golf & Event Project Title: Tuffshed Addition	Center Building Permit #:	Hydrology File #: B-17				
DRB#:						
Legal Description: A Portion of Balloon F						
City Address: 9401 Balloon Museum Drive		87113				
City Address. Otor Balloon Maccail Billy	7 II 7 II Daquerque, Tim	07110				
Applicant: Isaacson & Arfman, Inc.		Contact: Fred C. Arfman				
Address: 128 Monroe Street NE - Albud		Dryon I Dobriek				
	•					
Phone#: (505) 268-8828	_ rax#:	E-man: <u>rreda@iacivii.com</u> bryanb@iacivil.com				
Owner: City of Albuquerque		Contact:				
Address:						
Phone#:	Fax#:	E-mail:				
<b>DEPARTMENT:</b> TRAFFIC/ TRANSPOR Check all that Apply:						
Check an that Appry.	TYPE O	F APPROVAL/ACCEPTANCE SOUGHT:				
TYPE OF SUBMITTAL:		LDING PERMIT APPROVAL				
ENGINEER/ARCHITECT CERTIFICATION	CEN	CERTIFICATE OF OCCUPANCY				
PAD CERTIFICATION  CONCEPTUAL G & D PLAN	<u></u>	LIMINARY PLAT APPROVAL				
X GRADING PLAN		E PLAN FOR SUB'D APPROVAL				
DRAINAGE MASTER PLAN		E PLAN FOR BLDG. PERMIT APPROVAL AL PLAT APPROVAL				
DRAINAGE REPORT		SIA/ RELEASE OF FINANCIAL GUARANTEE				
FLOODPLAIN DEVELOPMENT PERMIT	<del></del>	INDATION PERMIT APPROVAL				
ELEVATION CERTIFICATE GRADING PERMIT APPROVAL						
CLOMR/LOMR SO-19 APPROVAL						
TRAFFIC CIRCULATION LAYOUT (TCL)		YING PERMIT APPROVAL				
TRAFFIC IMPACT STUDY (TIS) OTHER (SPECIFY)		ADING/ PAD CERTIFICATION				
PRE-DESIGN MEETING?		RK ORDER APPROVAL OMR/LOMR				
THE BESTS (THEBTILLS)	<u></u>	ODPLAIN DEVELOPMENT PERMIT				
		IER (SPECIFY)				
DATE SUBMITTED: May 20, 2020	Ry: Fred C Arfman					
DATE SUDMITTED. NIGY 20, 2020	by. <u>Tica O. Amilan</u>					

ELECTRONIC SUBMITTAL RECEIVED:\_\_\_

FEE PAID:\_\_\_\_



- A. THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA REQUIREMENTS.
- B. ALL WORK DETAILED ON THESE PLANS SHALL, EXCEPT AS OTHERWISE STATED ON OR PROVIDED FOR, BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS (COA SPEC.) AND BY THE GEOTECH REPORT (IF MADE AVAILABLE BY THE OWNER).
- C. NO WORK SHALL BE PERFORMED WITHOUT THE APPROPRIATE PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION.
- D. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE CLIENT AND VERIFY THE CLIENT'S INTENT BEFORE PROCEEDING.
- E. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY.
- F. CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK.
- G. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- H. CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS. EQUIPMENT SHALL ONLY OBSTRUCT DESIGNATED TRAFFIC LANES IF APPROPRIATE BARRICADING PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL IN THE RIGHT—OF—WAY.
- I. THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN THAT CONFORMS TO THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN

- BARRICADING PERMITS FROM THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- J. THE CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES.
- C. EXISTING UTILITY LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM811 (811) FOR UTILITY LINE SPOTS FIVE WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.
- L. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- M. VIBRATORY COMPACTION SHALL NOT BE USED OVER IN-PLACE UTILITIES.
- N. SOIL TESTING AND INSPECTION SERVICES DURING SITE OPERATIONS ARE REQUIRED.
  CONTRACTOR SHALL ALLOW TESTING LABS TO INSPECT AND APPROVE COMPACTED
  SUBGRADES, BACKFILL, AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE.
- O. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
- P. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- Q. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE OWNER FOR DIRECTION.

- R. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE MAY REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AN NDPES PERMIT, AND/OR AN EROSION AND SEDIMENT CONTROL (ESC) PERMIT (SWPPP, NPDES PERMIT, AND ESC PLAN BY OTHERS.) CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE WHO WILL PREPARE AND INSPECT REQUIRED ELEMENTS (IF REQUIRED).
- S. IF THE SITE IS SMALL ENOUGH NOT TO REQUIRE A SWPPP/NPDES PERMIT, THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR USING EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PUBLIC RIGHT-OF-WAY.
- T. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBLITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY AREAS OF EROSION AND INSTALL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
- U. REMOVAL OF EXISTING CURB AND GUTTER AND SIDEWALKS SHALL BE TO THE NEAREST
- V. ANY DAMAGE TO THE EXISTING CURB AND GUTTER, PAVEMENT, SIDEWALKS, STRIPING, AND SIGNAGE DURING CONSTRUCTION SHALL BE REPLACED.

### **KEYED NOTES**

- 1. CONSTRUCT PCC CONCRETE APRON WITH 3' WIDE (MINIMUM) ADA COMPLIANT PEDESTRIAN PATH: TARGET CROSS SLOPE = 1% TO 1.5%. CROSS SLOPE SHALL NOT EXCEED 2%.
- 2. CONSTRUCT PCC CONCRETE DRIVEPAD AT ELEVATIONS

NOTE: PAVING INFORMATION (MATERIAL, EXTENTS, JOINTS AND PAVING SECTIONS, SPECIFICATIONS AND DETAILS) BY OTHERS.

- 3. NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW WITHOUT AN APPROVED WORK ORDER OR EXCAVATION
- 4. PROVIDE SMOOTH TRANSITION TO EXISTING PAVEMENT.
- 5. 0.5' DESIGN CONTOURS ARE SHOWN DASHED TO CLARIFY GRADING CONCEPT.
- 6. ROOF DISCHARGE DIRECTION (SHEETFLOW). OWNER TO OBSERVE AFTER STORM EVENTS AND PROVIDE EROSION PROTECTION WHERE NECESSARY.
- REGRADE LANDSCAPE TO PROVIDE 6" DEPRESSED STORMWATER QUALITY RETENTION BASIN THIS AREA. SEE PLAN FOR REQUIRED VOLUME. NOTE: NO STORMWATER RETENTION WITHIN 10' OF ANY BUILDING.

## **CALCULATIONS**

CALCULATIONS: 2368 Balloon Fiesta Tuffshed: 05/14/2020

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

100-YEAR, 6-HOUR STORM

AREA OF	SITE:	1603	SF	=	0.04 ACRE
HISTORIC	FLOWS	S:	7 300		
		SF	%		
Area A	=	0	0%		
Area B	=	0	0%		
Area C		1603	100%		
Area D	=	0	0%		
Total	=	1603	100%		

#### DEVELOPED FLOWS:

		SF	%	EXCESS PRECIP:
Area A	9	0	0%	Precip. Zone 2
Area B	=	0	0%	$E_{A} = 0.53$
Area C	=	0	0%	$E_{\rm B} = 0.78$
Area D	=	1603	100%	$E_{\rm C} = 1.13$
Total	=	1603	100%	$E_{D} = 2.12$

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

		Weighted E=		$E_AA_A + E_BA_B + E_CA_C + E_DA_D$			
				AA + A	AB+Ac+	AD	
Hist. E	=	1.13	in.	Dev. E	=	2.12	i

On-Site Volume of Runoff: V360 = E\*A / 12Hist. V360 = 151 CF Dev. V360 = 283 CF On-Site Peak Discharge Rate:  $Qp = Q_{pA}A_A + Q_{pB}A_B + Q_{pC}A_C + Q_{pD}A_D / 43,560$ 

For Precipit	ation 2	Zo 2						
$Q_{pA}$	=	1.56			$Q_{pC}$	=	3.14	
QрВ	=	2.28			$Q_{pD}$	$\Rightarrow$	4.70	
Hist On	=	0.12	CES	Dev On	- 11	=	0.17	CF

#### STORMWATER QUALITY

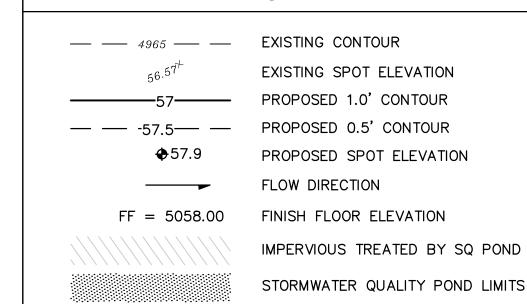
STORMWATER QUALITY CONTROL MEASURES ARE REQUIRED TO

THE PROPOSED CONSTRUCTION IS CONSIDERED REDEVELOPMENT: IMPERVIOUS AREA THAT IS BEING REDEVELOPED (REMOVED/REPLACED) IS SUBJECT TO A REDUCED RATE OF 0.26"/SF.

PROVIDE MANAGEMENT OF 'FIRST FLUSH'.

- THE IMPERVIOUS AREA FOR THIS PROPOSED CONSTRUCTION IS 1,200 SF (BUILDING) + 403 SF (PAVEMENT) = 1,603 SF.
- THE REQUIRED FIRST FLUSH RETENTION VOLUME = 0.26" \*
  TYPE 'D' AREA: 0.26/12 \* (1,603 SF) = 35 CF. A PORTION
  OF THE EXISTING GRAVEL LANDSCAPING (HATCHED AREA) WILL
  BE DEPRESSED 6" TO STORE THE REQUIRED VOLUME.

## **LEGEND**



## PROJECT INFORMATION

SITE

**FIESTA** 

BALLOON

1"=750'±

X - B - 17

**VICINITY MAP B-17** 

BALLOON

FIESTA

North 1-25

PARK

Area – CPO-9

PROPERTY: THE SITE IS A FULLY DEVELOPED PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP B-17. THE SITE IS BOUND TO THE WEST BY PILOT'S PARKWAY, TO THE NORTH BY BALLOON FIESTA FIELD, TO THE EAST BY THE GOLF AND EVENT CENTER AND TO THE SOUTH BY BALLOON MUSEUM DR. N.E.

<u>PROPOSED IMPROVEMENTS</u>: THE PROPOSED IMPROVEMENTS INCLUDE A 1,200 SF TUFFSHED WITH ASSOCIATED CONCRETE ACCESS.

<u>LEGAL</u>: A PORTION OF BALLOON FIESTA PARK, ALBUQUERQUE, NM

ADDRESS: 9401 BALLOON MUSEUM DR. NE, 87113

<u>BENCHMARK</u>: AGRS BENCHMARK — USGLO BRASS CAP AT THE NORTH END OF SAN MATEO BLVD. ELEVATION = 5135.555 (NAVD88).

OFF-SITE FLOW: MINOR SHEETFLOW FLOW FROM UPSTREAM WILL BE DIRECTED AROUND THE NEW CONSTRUCTION TO CONTINUE ALONG THE HISTORIC FLOWPATH.

FLOOD HAZARD: PER FEMA NATIONAL FLOOD HAZARD MAP 35001C0128G, EFFECTIVE DATE 09-26-2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

DRAINAGE PLAN CONCEPT: THE PROPOSED IMPERVIOUS ADDITION (BUILDING AND ACCESS DRIVES) WILL REPLACE GRAVEL (LAND TREATMENT 'C') RESULTING IN A MINOR (0.05 CFS) INCREASE IN THE 100-YEAR 6-HOUR STORM DISCHARGE. FLOW WILL CONTINUE ALONG THE HISTORIC FLOWPATHS TO THE AMAFCA CHANNEL APPROX. 250' TO THE WEST. A SHALLOW STORMWATER QUALITY POND WILL BE PROVIDED TO RETAIN THE REQUIRED VOLUME BASED ON A REDEVELOPMENT RATE OF 0.26" PER SF OF NEW IMPERVIOUS AREA.

ENGINEER: ISAACSON & ARFMAN, INC.

505-268-8828

EYOR: RIO GRANDE SURVEYING CO. PC (505) 379-4579

Isaacson & Arfman, Inc.

Civil Engineering Consultants

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# BALLOON FIESTA GOLF & EVENT CENTER TUFFSHED ADDITION

LEE LANDSCAPES

### Drainage & Grading Plan

Date:	NO.	Revision:	Date:	Job No.
MAY 2020				2368
Orawn By:				
•				CG-101
BJB				
Ckd By:				CH OF
FCA				SH. OF