

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

January 28, 2020

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

RE: Starbucks
1314 Gibson Blvd. SE
Grading and Drainage Plan
Engineer's Stamp Date: 01/16/20
Hydrology File: L15D041

Dear Mr. Arfman:

PO Box 1293

Based upon the information provided in your submittal received 01/17/2020, the Grading and 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

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.

www.cabq.gov

Also as a reminder, please provide a Drainage Covenant for the proposed stormwater quality ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee will be required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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: Starbuck Drive-Thru Building Permit #: _____ Hydrology File #: L15
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: Lot A, Hugh B Woodward Subdivision -- Gibson & Miles Area
City Address: 1314 Gibson Blvd. SE - Albuquerque, NM 87106

Applicant: Isaacson & Arfman, Inc. Contact: Fred C. Arfman
Bryan J. Bobrick
Address: 128 Monroe Street NE - Albuquerque, NM 87108
Phone#: (505) 268-8828 Fax#: _____ E-mail: freda@iacivil.com
bryanb@iacivil.com
Owner: I25 & Gibson, LLC Contact: Wes Butero
Address: 6801 Jefferson Street NE, Suite 300 - Albuquerque, NM 87109
Phone#: (505) 798-9800 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:

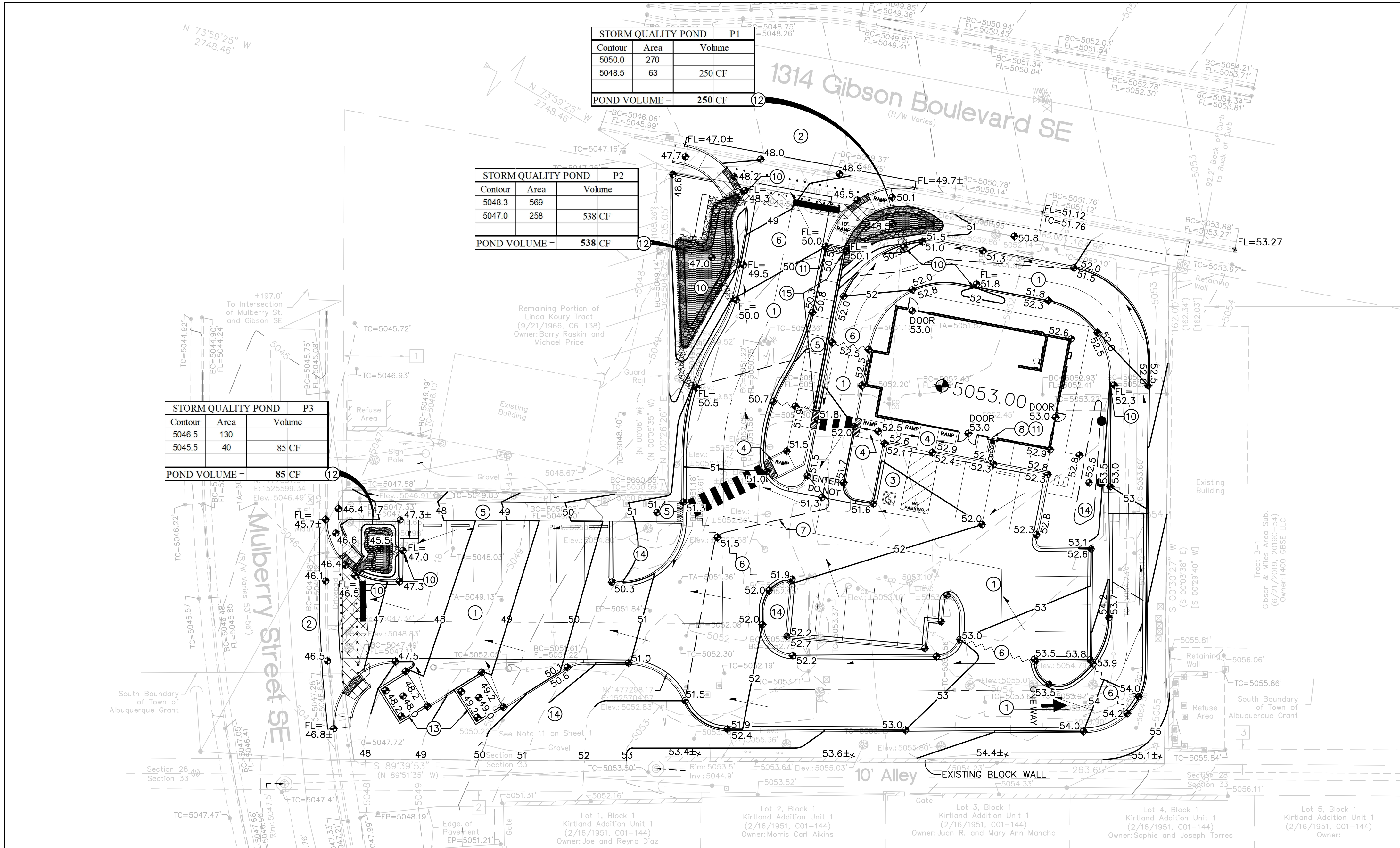
☒ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: January 17, 2020 By: Fred C. Arfman

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



KEYED NOTES

- CONSTRUCT NEW PAVING AT ELEVATIONS SHOWN. SEE PAVING PLAN FOR MATERIAL, EXTENTS, JOINTS AND SECTIONS. NOTE: TO ENSURE READABILITY, NOT ALL PAVEMENT SPOT ELEVATIONS SHOW ADJACENT TOP OF CURB / TOP OF WALK ELEVATIONS. TEXT SHOWN WITHIN FLOWLINE INDICATES FLOWLINE ELEVATION. ADD 0.5' TYPICAL FOR TOP OF CURB / TOP OF ADJACENT WALK ELEVATIONS.
- SEE PAVING PLANS FOR ADDITIONAL INFORMATION REGARDING CONSTRUCTION WITHIN R/W. NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT.
- SLOPE WITHIN HANDICAP PARKING AREAS TO BE ADA COMPLAINT. TARGET SLOPE = 1% TO 1.5% SLOPE SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.
- CONSTRUCT ADA COMPLIANT ACCESS RAMP. TARGET CROSS SLOPE = 1% TO 1.5% CROSS SLOPE SHALL NOT EXCEED 2%. TARGET LONGITUDINAL SLOPE = 7% LONGITUDINAL SLOPE SHALL NOT EXCEED 12:1 (8.3%).
- CONSTRUCT ADA COMPLIANT PEDESTRIAN ACCESS WALK AT ELEVATIONS SHOWN. TARGET CROSS SLOPE = 1% TO 1.5% CROSS SLOPE SHALL NOT EXCEED 2%. LONGITUDINAL SLOPE SHALL NOT EXCEED 20:1 (5%).
- HIGH POINT / GRADE BREAK LOCATION.
- 0.5' DESIGN CONTOURS ARE SHOWN DASHED WHERE NECESSARY TO CLARIFY GRADING CONCEPT. SEE LEGEND FOR ADDITIONAL INFORMATION.
- ROOF DISCHARGE TO BE RELEASED AT GRADE.
- NOT USED.
- PROVIDE 24" WIDE OPENING IN CURB TO PASS FLOW.
- CONSTRUCT 12" WIDE COVERED CONCRETE SIDEWALK CULVERT PER COA STD. DWG. 2236. SEE CG-102 FOR ADDITIONAL INFORMATION.
- CONSTRUCT 1' DEEP STORMWATER QUALITY POND TO ELEVATIONS AND VOLUMES SHOWN. STORMWATER QUALITY PONDING VOLUMES WILL BE VERIFIED AS PART OF AS-BUILT CERTIFICATION. PONDS WHICH DO NOT PROVIDE THE REQUIRED VOLUME WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
- CONSTRUCT CONCRETE DUMPSTER PAD TO DIRECT LOCALIZED STORMWATER TO PROPOSED SANITARY SEWER DRAINAGE INLET. SEE UTILITY PLAN AND REFUSE ENCLOSURE DETAIL.
- DEPRESS LANDSCAPING 4"-6" FOR GENERAL WATER HARVESTING. NOTE: NO WATER HARVESTING SHALL OCCUR WITHIN 10' OF ANY BUILDING.
- CONSTRUCT RETAINING WALL (<30" RETAINING) AT ELEVATIONS SHOWN. RETAINING HEIGHT VARIES. SEE ARCHITECTURAL FOR DETAILS INCLUDING MATERIAL, COLOR. TOTAL HEIGHT. STRUCTURAL DESIGN TO BE PROVIDED BY WALL CONTRACTOR.
- INSTALL ANGULAR ROCK EROSION PROTECTION (4" AVG. DIA., 8" DEEP) ON ALL SIDE SLOPES > 3:1 AND TO LIMITS HATCHED.

VICINITY MAP

1"=750'±
L-15-Z

PROJECT DATA

PROPERTY: THE SITE IS FULLY DEVELOPED PROPERTY LOCATED WITHIN COA. VICINITY MAP L-15. THE SITE IS BOUND TO THE EAST BY DEVELOPED COMMERCIAL, TO THE WEST BY MULBERRY STREET AND DEVELOPED COMMERCIAL, TO THE SOUTH BY DEVELOPED RESIDENTIAL AND TO THE NORTH BY GIBSON BLVD. SE.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A RESTAURANT DRIVE-THRU WITH ASSOCIATED ASPHALT PAVED ACCESS, PARKING, AND LANDSCAPING.

LEGAL: LOT A-GIBSON & MILES AREA, WOODWARD--HUGH B SUBDIVISION.

ADDRESS: 1314 GIBSON BLVD. SE

BENCHMARK: ACS MONUMENT "G-10" - HAVING AN ELEVATION OF 4980.822'. NAVD 1988.

OFF-SITE FLOW: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35001C0342G DATED 09/26/2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

DRAINAGE PLAN CONCEPT:

THE SITE WAS PREVIOUSLY FULLY DEVELOPED WITH FREE DISCHARGE TO THE SURROUNDING STREETS. THE PROPOSED IMPROVEMENTS WILL CONTINUE TO FREE DISCHARGE WITH THE EXCEPTION OF STORMWATER QUALITY PONDING AND DEPRESSED LANDSCAPING.

DRAINAGE BASINS

BASIN NO. 1 DESCRIPTION: Sheriff's Dept and adjacent road

Area of basin flows = 7792 SF = 0.18 Ac.

The following calculations are based on Treatment %s as shown in table to the right

Treatment	%
A	0%
B	5%
C	10%
D	85%

Sub-basin Weighted Excess Precipitation: Weighted E = 1.95 in.

Sub-basin Volume of Runoff: V₅₀₀ = 1269 CF

Sub-basin Peak Discharge Rate: Q_p = 0.8 cfs

STORMWATER QUALITY

188 CF

BASIN NO. 2 DESCRIPTION: Sheriff's Dept and adjacent road

Area of basin flows = 13995 SF = 0.3 Ac.

The following calculations are based on Treatment %s as shown in table to the right

Treatment	%
A	0%
B	5%
C	10%
D	85%

Sub-basin Weighted Excess Precipitation: Weighted E = 1.95 in.

Sub-basin Volume of Runoff: V₅₀₀ = 2279 CF

Sub-basin Peak Discharge Rate: Q_p = 1.4 cfs

STORMWATER QUALITY

337 CF

BASIN NO. 3 DESCRIPTION: Sheriff's Dept and adjacent road

Area of basin flows = 16021 SF = 0.4 Ac.

The following calculations are based on Treatment %s as shown in table to the right

Treatment	%
A	0%
B	5%
C	10%
D	85%

Sub-basin Weighted Excess Precipitation: Weighted E = 1.95 in.

Sub-basin Volume of Runoff: V₅₀₀ = 2609 CF

Sub-basin Peak Discharge Rate: Q_p = 1.6 cfs

STORMWATER QUALITY

386 CF

STORMWATER QUALITY

STORMWATER QUALITY CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH'. COA HYDROLOGY CURRENTLY HAS THREE CATEGORIES RELATING TO STORMWATER QUALITY VOLUME REQUIREMENTS:

THE ESTIMATED IMPERVIOUS AREA FOR THIS PROPERTY IS CALCULATED AS 85% OF TOTAL AREA. (0.85 * 37,808) = 32,137 SF.

BECAUSE THIS PROPERTY WAS PREVIOUSLY FULLY DEVELOPED, THE REQUIRED FIRST FLUSH RETENTION VOLUME FOR REDEVELOPMENT = 0.26' * TYPE 'D' AREA: 0.26/12 * (32,137 SF) = 696 CF.

THREE STORMWATER QUALITY RETENTION PONDS WILL BE CONSTRUCTED.

THE THREE STORMWATER QUALITY PONDS ARE SIZED TO RETAIN 872 CF > 696 CF.

DISCHARGE CALCULATIONS

CALCULATIONS: 2338 Gibson Coffee Shop - December 6, 2019

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

100-YEAR, 6-HOUR CALCULATIONS

AREA OF SITE: 37808 SF = 0.87 ACRE

100-year, 6-hour

HISTORIC FLOWS:

Area	Treatment SF	%
Area A	0	0%
Area B	2268	6%
Area C	5671	15%
Area D	29868	79%
Total Area	37808	100%

DEVELOPED FLOWS:

Area	Treatment SF	%
Area A	0	0%
Area B	1890	5%
Area C	3781	10%
Area D	32137	85%
Total Area	37808	100%

EXCESS PRECIP:

Precip. Zone	E _A	E _B	E _C	E _D
2	0.53	0.78	1.13	2.12

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

Weighted E = $\frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$

Historic E = 1.89 in. Developed E = 1.95 in.

On-Site Volume of Runoff: V₃₆₀ = $\frac{E * A}{12}$

Historic V₃₆₀ = 5958 CF Developed V₃₆₀ = 6156 CF

On-Site Peak Discharge Rate: Q_p = $\frac{Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D}{43,560}$

For Precipitation Zone 2

Q _{pA}	Q _{pB}	Q _{pC}	Q _{pD}
1.56	2.28	3.14	4.70

Historic Q_p = 3.8 CFS Developed Q_p = 3.8 CFS

LEGEND

EXISTING CONTOUR

EXISTING SPOT ELEVATION

PROPOSED 1.0' CONTOUR

PROPOSED 0.5' CONTOUR

PROPOSED SPOT ELEVATION

FLOW DIRECTION

FINISH FLOOR ELEVATION

ROCK EROSION CONTROL

LIMITS OF PONDING

FF = 5053.00

Isaacson & Arfman, Inc.

Civil Engineering Consultants

128 Monroe Street NE
Albuquerque, NM 87108
505-268-8828 | www.iacivil.com

STARBUCK DRIVE-THRU
1314 GIBSON BLVD. S.E. 87106
I25 & GIBSON, LLC

GRADING & DRAINAGE PLAN

Date:	No.	Revision:	Date:	Job No.
JAN. 2020				2338

Drawn By:	Checked By:	Scale:
BJB		

Okd By:	Scale:
FCA	

1 OF 7