CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

September 14, 2020

David Thompson
Thompson Engineering Consultants, Inc.
P.O. Box 65760
Albuquerque, NM 87190

RE: **Starbuck's Menaul and Carlisle**
American Square
Request for Certificate of Occupancy - Permanent
Hydrology Final Inspection –Approved
Grading and Drainage Plan Stamp Date: 10/24/19
Certification Dated: 9/8/20
Drainage File: H16D083E

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Dear Mr. Thompson:

Based on the submittal received on 9/8/20 and field inspections 9/11/20, this certification is approved in support of Permanent Certificate of Occupancy by Hydrology.
Please note that there is a discrepancy between the plan and what is in the field. The pond on the north side of the drive-thru entrance has a curb-cut adjacent to the entrance for storm flows to enter in to the pond, but the grades in the pond at this cut are higher than the cut and the grades outside this cut slope away from the pond. This will act more as an overflow than inlet, which is not needed for this pond. I am inclined to have this cut closed, but I do not believe it will be detrimental to the site drainage, so I will not require this to be done.

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: Starbuck's at Menaul and Carlisle NE Building Permit #: _____ Hydrology File #: H16-D083E

DRB#: PS-2019-00030 EPC#: _____ Work Order#: _____

Legal Description: Lot 2-A, American Square

City Address: _____

Applicant: ThompsonEngineering Consultants, Inc. Contact: David Thompson

Address: P.O. Box 65760, Albuquerque, NM 87193

Phone#: (505) 271-2199 Fax#: _____ E-mail: tecnm@yahoo.com

Owner: Vista Oriente Ltd. Co. Contact: Jeff Jesionowski

Address: 4700 Montgomery NE, Suite 200, Albuquerque, NM 87109

Phone#: (505) 259-0991 Fax#: _____ E-mail: jeff@amcdevelopment.net

TYPE OF SUBMITTAL: _____ PLAT (___# OF LOTS) ____ RESIDENCE X DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

X 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
X 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: 9-8-2020 By: David Thompson

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE CERTIFICATION

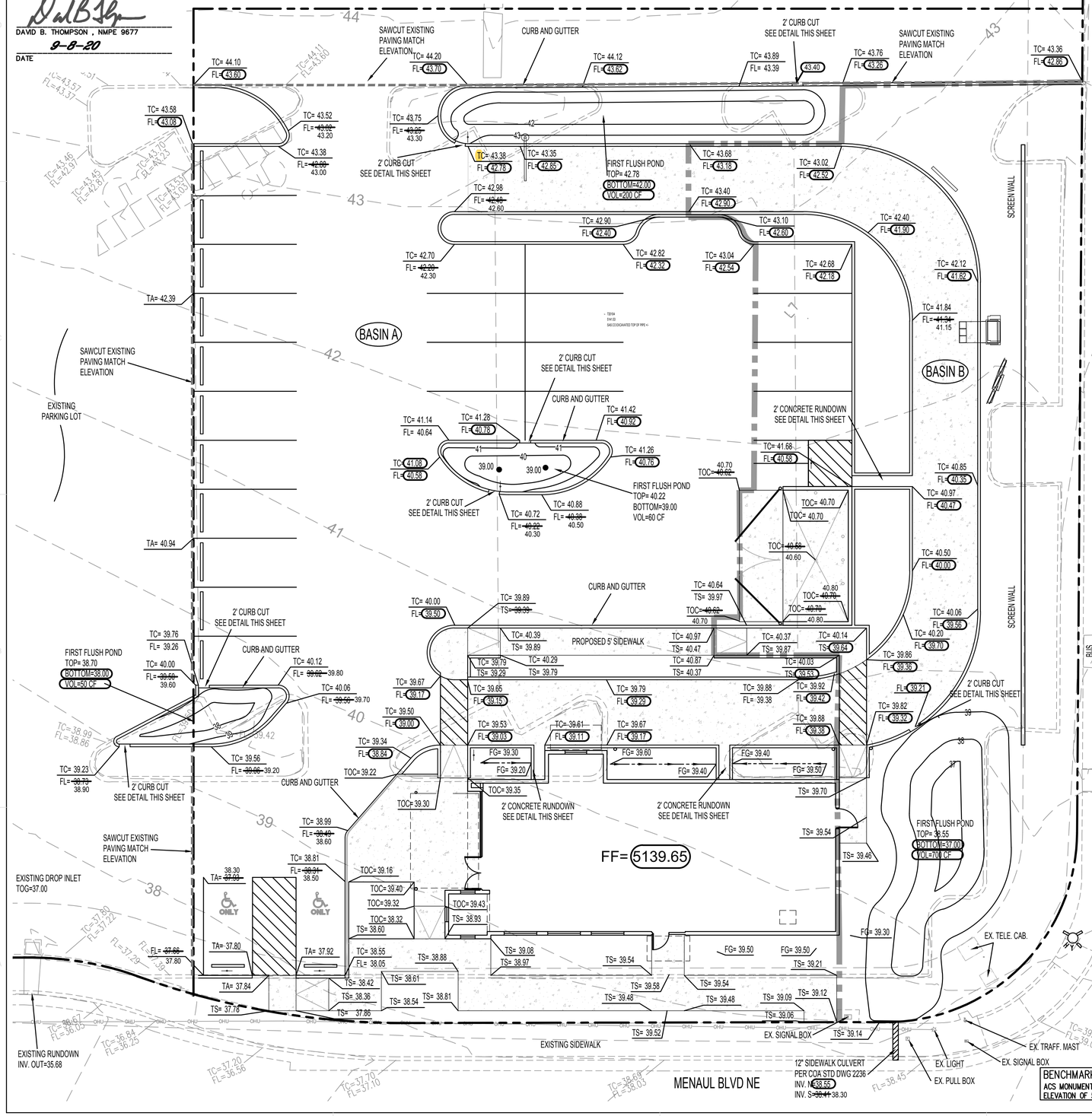
I, DAVID B. THOMPSON, NMPE 9677, OF THE FIRM THOMPSON ENGINEERING CONSULTANTS, INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 1-25-12. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ANDREW S. MEDIAN, NMPS 12649, OF SANDIA LAND SURVEYING LLC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 9-4-20 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

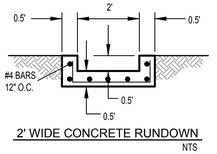
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

DAVID B. THOMPSON , NMPE 9677

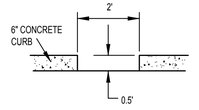
9-8-20

DATE

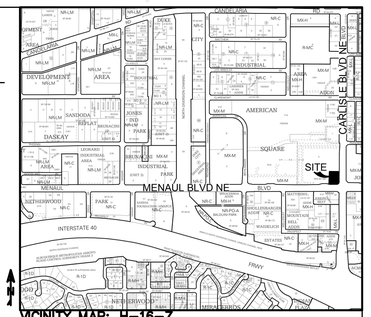




2' WIDE CONCRETE RUNDOWN
NTS



2' CURB CUT
NTS



VICINITY MAP: H–16–Z

DRAINAGE PLAN

LEGAL DESCRIPTION: FUTURE PARCEL FROM OF LOT 2, AMERICAN SQUARE

SITE AREA: 0.686 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0351H) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH SETION 22 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), ENTITLED "DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 24-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 1 SO THE 100-YEAR, 24-HOUR STORM EVENT IS 2.66 INCHES. UNDER EXISTING CONDITIONS, THE FUTURE PARCEL IS A PARKING LOT WITH LAND TREATMENTS B, C, AND D.

THE FUTURE PARCEL IS LOCATED IN THE NEAR NORTHEAST ALBUQUERQUE AT THE CORNER OF THE CARLISLE/MENAUL INTERSECTION. CURRENTLY THE SITE DRAINS FROM NORTHEAST TO SOUTHWEST TO THE AMERICAN FURNITURE PARKING AREA. THE EXISTING PEAK RUNOFF FROM THE FUTURE PARCEL UNDER EXISTING CONDITIONS IS 3.13 CFS AND 5,070 CUBIC FEET OF RUNOFF VOLUME DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROJECT INVOLVES THE CONSTRUCTION OF A STARBUCKS COFFEE SHOP WITH PARKING AND LANDSCAPING. THE SITE HAS BEEN DIVIDED INTO TWO DRAINAGE BASINS. BASIN A INCLUDES THE WESTERN MAJORITY OF THE SITE. BASIN A DRAINS TO THE SOUTHWEST CORNER OF THE SITE TO AN EXISTING INLET WEST OF THE SITE. FIRST FLUSH PONDS ARE LOCATED IN SOME OF THE LANDSCAPED ISLANDS. THE RUNOFF FROM BASIN A IS 2.12 CFS. BASIN B INCLUDES THE EAST PROTION OF THE SITE. BASIN B WILL DRAIN TO THE SOUTHEAST PART OF THE SITE TO A FIRST FLUSH POND, WHICH HAS AN OVERFLOW INTO MENAUL BLVD. THROUGH A 24-INCH SIDEWALK CULVERT. RUNOFF FROM BASIN B IS 0.73 CFS. FIRST FLUSH POND VOLUME TOTALS 1,010 CUBIC FEET.

FIRST FLUSH = (0.34IN/12IN/FT) X (((0.478 X .867) + (0.208 X .41)) X 43,560SF/AC) = 617 CF REQUIRED, 1,010 CF PROVIDED

SIDEWALK CULVERT CAPACITY, WEIR EQUATION = (2.7) X (1FT) X (7IN/12IN/FT)^1.5 = 1.2 CFS

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
SITE	0.6860	0.00	3.60	3.60	92.80	2.04	0.12	5,070	0.14	5,995	3.13
TOTAL RUNOFF	0.686						0.12	5,070	0.14	5,995	3.13
PROPOSED CONDITIONS											
BASIN A	0.4780	0.00	6.60	6.70	86.70	1.97	0.08	3,410	0.09	4,012	2.12
BASIN B	0.2080	0.00	29.50	29.50	41.00	1.43	0.02	1,082	0.03	1,206	0.73
TOTAL RUNOFF	0.686						0.10	4,492	0.12	5,217	2.85
EXCESS PRECIP.		0.53	0.78	1.13	2.12	E_t (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	Q_{PA} (cfs)					

ZONE = 2
P_{6HR} (in.) = 2.35
P_{24HR} (in.) = 2.75
P_{100YR} (in.) = 3.95

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$
V_{6HR} (acre-ft) = (WEIGHTED E)(AREA)/12
V_{100YR} (acre-ft) = $V_{6HR} + (A_M)(P_{100YR} - P_{6HR})/12$
Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR (SPECIAL ORDER 19 ~ "SO-19")

1. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
2. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT **NEW MEXICO ONE CALL, DIAL "811"** [OR (505) 260-1990] FOR THE LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
7. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
8. CONTRACTOR MUST CONTACT HENRY BLAIR AT (505) 203-7358 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE AN INSPECTION.

LEGEND

TC= TOP OF CURB
FL= FLOW LINE
TS= TOP OF SIDEWALK
TOC= TOP OF CONCRETE
TA= TOP OF ASPALT
FG= FINISHED GRADE
EXISTING CONTOURS
EXISTING CURB & GUTTER
EXISTING SIDEWALK
EXISTING STORM DRAIN
TC= 44.12 FL= 43.62 40.50 AS-BUILT NEW ELEVATION
EXISTING STORM INLET
PROPOSED CURB
PROPOSED CURB AND GUTTER
PROPOSED HANDICAP RAMP
PROPERTY BOUNDARY
BASIN BOUNDARY
PROPOSED CHEVRON STRIPES
PROPOSED CONCRETE
PROPOSED SWALE
TC= 44.12 FL= 43.62 AS-BUILT ELEVATION

Thompson Engineering Consultants, Inc.
tecnm@yahoo.com
P.O. BOX 65760 ALBUQUERQUE, NM 87193
PHONE: (505) 271-2199 FAX: (505) 830-9248

10 5 0 5 10

SCALE: 1"=10'

ARCHITECT

DAVID B. THOMPSON 9677 LICENSED PROFESSIONAL ENGINEER 10-24-19

ENGINEER

PROJECT

Starbucks Shell
Grading and Drainage Plan
Northwest Corner of Carlisle & Menaul
Albuquerque, New Mexico

REVISIONS

DRAWN BY	DEM
REVIEWED BY	DBT
DATE	9-8-20
PROJECT NO.	X

DRAWING NAME

Starbucks Shell
Grading and Drainage Plan

SHEET NO.

C1 OF 3