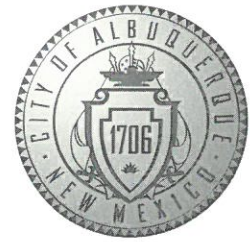


CITY OF ALBUQUERQUE



December 22, 2017

Richard Dourte, P.E.
RHD Engineering, LLC.
4305 Purple Sage Ave. NW
Albuquerque, NM 87120

**RE: Heritage Marketplace Tract A2 (Burger King)
7900 Ladera Dr NW
Grading and Drainage Plan
Engineer's Stamp Date 12/19/17 (File: H09D024A)**

Dear Mr. Dourte:

Based on the information provided in your submittal received 12/19/17, the Grading and Drainage Plan cannot be approved for Building Permit. This development is site plan controlled and will require an approved conceptual grading and drainage plan and DRB approval of the site development plan. In anticipation of DRB action, the following will be required:

Prior to Site Plan for Building Permit:

1. The Grading and Drainage Plan will need to be clearly labeled as "Conceptual, not for construction" for inclusion in the Site Plan.
2. Include a narrative describing how this plan of development is in compliance with the approved Heritage Marketplace Drainage Report (H09D024).
3. The dumpster area should be contained, plumbed through a grease trap, and into the sanitary sewer. Include the utility plan if this information is located there. You may also want to raise the dumpster pad elevation to keep storm water from entering the dumpster area.
4. Please provide written permission from the adjoining property (Walmart) for work on their property.

Prior to Building Permit:

5. A detailed grading and drainage plan, with the "conceptual" markings removed will be required for Building Permit.
6. It is unclear that storm water will be forced into the pond at the curb cut. Please include a clearly defined waterblock at the SE property line/drive entrance that will force flows into the pond instead of allowing them into the Walmart parking lot.

CITY OF ALBUQUERQUE



7. A Private Facility Drainage Covenant is required for the stormwater quality pond. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to City of Albuquerque) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants.
8. Additional comments may be provided at Building Permit, based on the outcome of the above remarks and level of detail shown on plans.

Prior to Certificate of Occupancy:

9. The Private Facility Drainage Covenant must be recorded with Bernalillo County and a copy included with the drainage certification.
10. Payment of Fee-in-Lieu will be required for any ponding areas not constructed and certified.

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

PO Box 1293

Sincerely,

Albuquerque

NM 87103

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

www.cabq.gov



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Burger King Building Permit #: _____ City Drainage #: _____
DRB#: 100375 EPC#: 17DRB-70164 Work Order#: _____
Legal Description: Tract A2- Heritage Market Place subdivision
City Address: 7900 Ladera Drive NW

Engineering Firm: RHD Engineering, LLC Contact: Richard Dourte
Address: 4305 Purple Sage Ave. NW Alb. NM, 87120
Phone#: 505-288-1621 Fax#: _____ E-mail: rhdengineering@outlook.com

Owner: Burger King Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Architect: Joe Simons Architecture Contact: Joe Simons
Address: _____
Phone#: _____ Fax#: _____ E-mail: joe@simonsarchitectur.com

Surveyor: Construction Survey Technologies, inc Contact: David Acosta
Address: _____
Phone#: _____ Fax#: _____ E-mail: dpacosta@cstinm.com

Contractor: PJ Development Contact: Pat Joseph
Address: _____
Phone#: _____ Fax#: _____ E-mail: pat@pjdev.com

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN 1st SUBMITTAL
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED: Yes ☒ No ☐ Copy Provided

DATE SUBMITTED: 12-18-17

By: _____

Richard Dourte

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

CAUTION:
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.

DRAINAGE NARRATIVE:

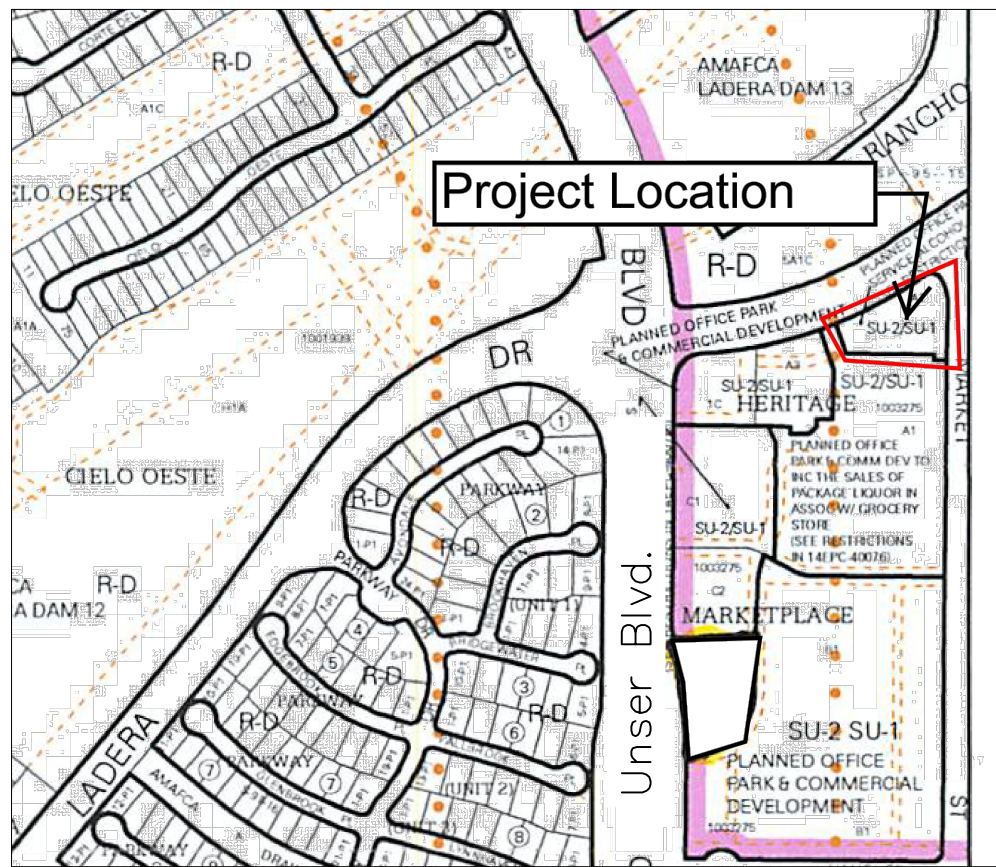
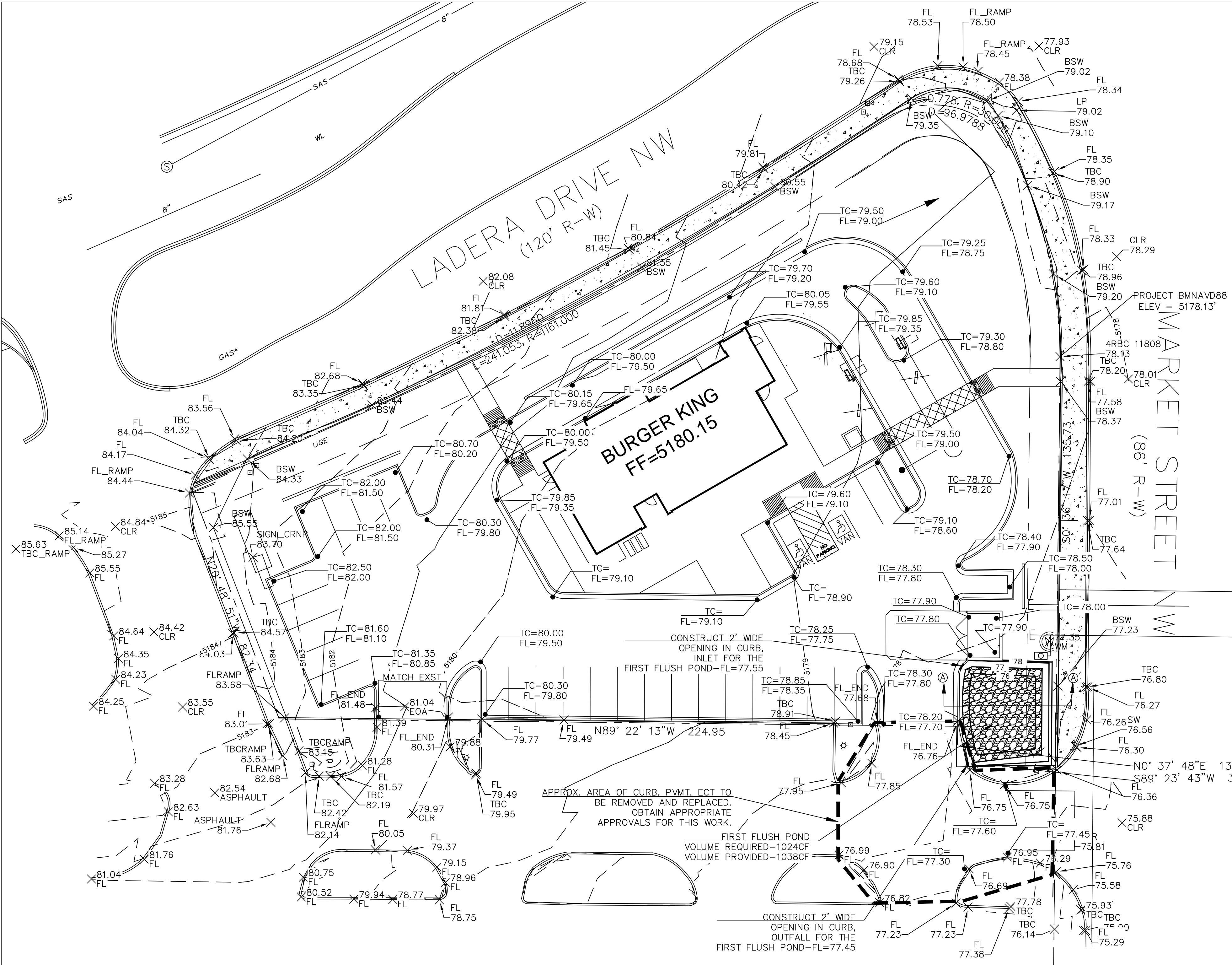
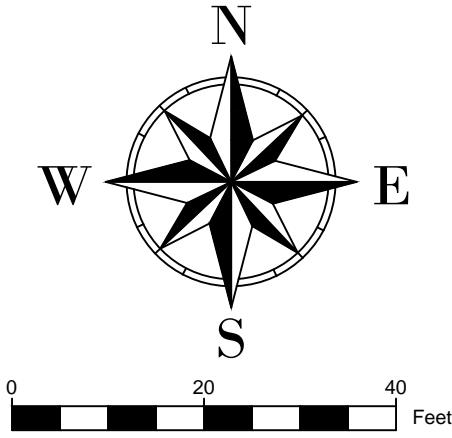
DRAINAGE NARRATIVE:
1. THIS SITE IS NOT LOCATED WITHIN A
FLOOD PLAIN. REFER TO THE FEMA EXCERPT
THIS SHEET.
2. THIS SITE IS LOCATED WITHIN A MASTER
PLAN DRAINAGE AREA FOR THE HERITAGE
MARKET PLACE (H09-D024) THAT ALLOTS
3.84 CFS FOR THIS PROPERTY (100YR, 6HR).
THIS SITE GENERATES 3.63CF (100YR, 6HR)
AS SHOWN ON SHEET 2.
3. THE REQUIRED FIRST FLUSH RETENTION IS
1024CF. THE FIRST FLUSH POND VOLUME IS
1038CF, THUS ADEQUATE VOLUME IS
RETAINED.

GENERAL NOTES:

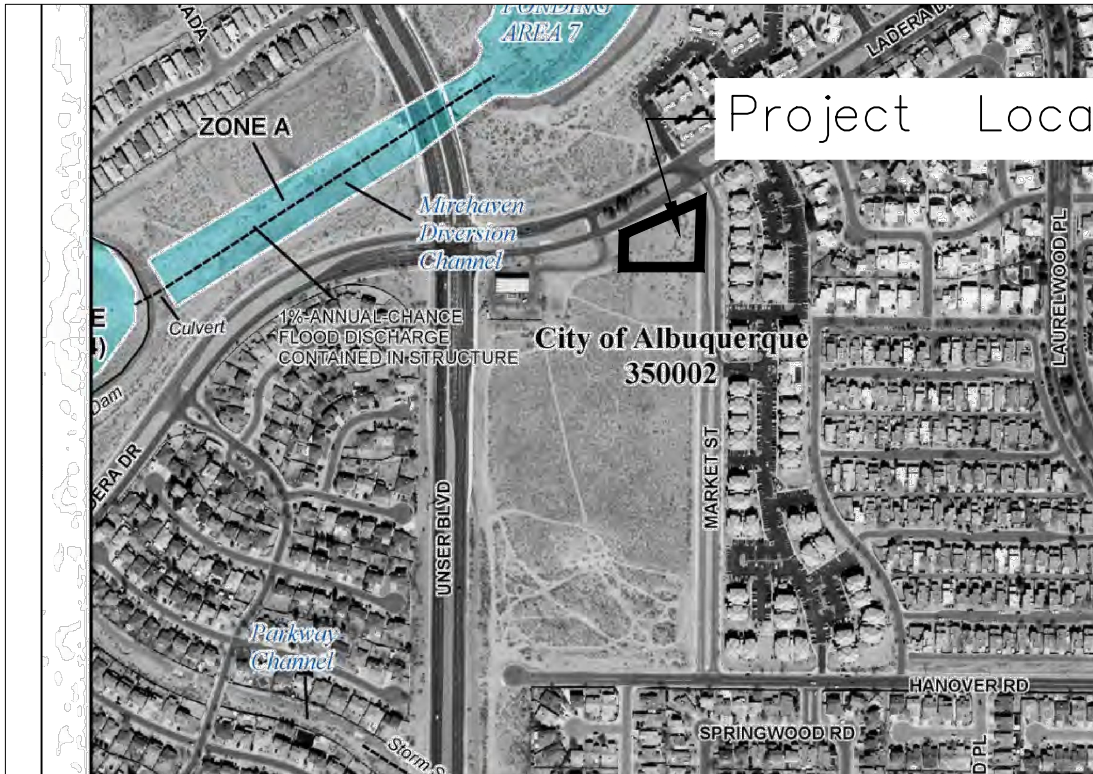
1. THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER
TO THE FIRM MAP 35001C0326J.(EXCERPT ATTACHED).
2. RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL
REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.
4. MODIFICATIONS OR ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES/EROSION
MITIGATION IMPROVEMENTS SHALL BE DONE IN THE SAME MANNER AS THE ORIGINAL
IMPROVEMENT.
5. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.
7. ALL WORK ON THIS PLAN SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE
STANDARDS. ALL APPLICABLE PERMITS SHALL BE OBTAINED PRIOR TO WORK COMMENCING.
8. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF
ALBUQUERQUE STANDARDS.
9. THE SURVEY INFORMATION WAS PROVIDED BY CONSTRUCTION SURVEY TECHNOLOGIES,
INC.
10. FOR SITE DIMENSIONS, BUILDING AND INFRASTRUCTURE LOCATION REFER TO THE SITE
PLAN.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE
PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING
CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS
INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT
ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE
RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND
WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: H-09-Z



FIRM MAP: 35001C0326J

LEGAL DESCRIPTION:

TRACT A2, HERITAGE MARKET PLACE SUBDIVISION
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE
NOTED.
2. RETAIN THE FIRST .44' OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO
THE WATER QUALITY REQUIREMENTS

LEGEND

TC=46.00	PROPOSED SPOT ELEVATION
FL=46.00	EXISTING SPOT ELEVATION
FL=44.00	EXISTING SPOT ELEVATION
-----5601-----	EXISTING CONTOUR
-----5600-----	EXISTING INDEX CONTOUR
-----5601-----	PROPOSED CONTOUR
-----5600-----	PROPOSED INDEX CONTOUR
-----	LOT LINE
-----	CENTERLINE
-----	RIGHT-OF-WAY
-----	PROPOSED RETAINING WALL
-----	PROPOSED ROCK FACE WALL
-----	PROPOSED CURB AND GUTTER SEE DETAIL SHEET 2
-----	PROPOSED EDGE OF CONCRETE
-----	PROPOSED FLOW DIRECTION
-----	EXISTING WALL
-----	PROPOSED BASIN BOUNDARY

I HAVE PERSONALLY INSPECTED THE PROPERTY ON 12-06-17. NO
EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE
TOPO SHOWN.
Richard Dourte P.E. #10854

ENGINEER'S SEAL	Title: BURGER KING 7900 LADERA DRIVE NW GRADING AND DRAINAGE PLAN	DRAWN BY
		DATE
12-18-17	RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	SHEET # 1 of 2
Richard Dourte P.E. #10854		JOB #

Project: Burger King on Ladera/Market Street near Unser
Drainage Calculations - Zone 1

Depth (inches) at 100yr Storm					
Zone	P60	P360	P1440	P4days	P10days
1	1.87	2.20	2.66	3.12	3.67
2	2.01	2.35	2.75	3.30	3.95
3	2.14	2.60	3.10	3.95	4.90
4	2.23	2.90	3.65	4.70	5.95

Weighted E= ((Ea* A_a)+(Eb* A_b)+(Ec* A_c)+(Ed* A_d))/(A_a + A_b + A_c + A_d)
 V_{360} =(Weighted E * P_{360})/12 in/ft
 V_{1440} = V_{360} + A_d *(P_{1440} - P_{360})/12in/ft
 V_{4days} = V_{360} + A_d *(P_{4days} - P_{360})/12in/ft
 V_{10days} = V_{360} + A_d *(P_{10days} - P_{360})/12in/ft

Excess Precipitation, E(inches) - 6 HR Treatment				
Zone	A	B	C	D
1	0.44	0.67	0.99	1.97
2	0.53	0.78	1.13	2.12
3	0.66	0.92	1.29	2.36
4	0.80	1.08	1.46	2.64

Peak Discharge (CFS/ACRE) 100 YR Treatment				
Zone	A	B	C	D
1	1.29	2.03	2.87	4.37
2	1.56	2.28	3.14	4.70
3	1.87	2.60	3.45	5.02
4	2.20	2.92	3.73	5.25

*****EXISTING CONDITIONS*****

Area	SQ. FT	Acres
A=	0	0.000
B=	0	0.000
C=	41137	0.944
D=	0	0.000
Total	41137	0.944
Weighted E=		0.990

Design Flows (CFS)			
Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	41137	0.944	2.71
D=	0	0.000	0.00
Total (CFS)			2.71

	V_{360}	V_{1440}	V_{4days}	V_{10days}
Cubic feet	3393.8	3393.8	3393.8	3393.8
Acre-ft	0.08	0.08	0.08	0.08

*****PROPOSED CONDITIONS*****

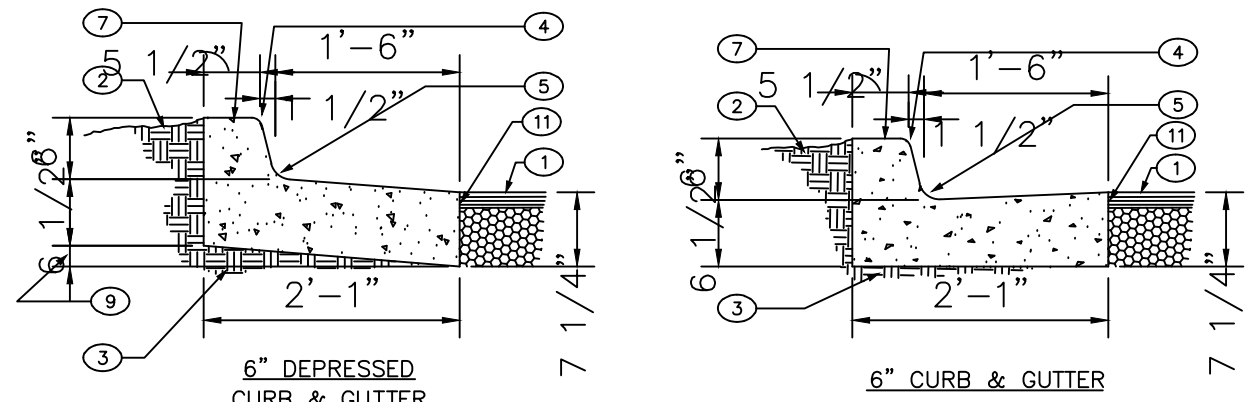
Area	SQ. FT	Acres
A=	0	0.000
B=	0	0.000
C=	14422	0.331
D=	26715	0.613
Total	41137	0.944
Weighted E=		1.626

Design Flows (CFS)			
Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	14422	0.331	0.95
D=	26715	0.613	2.68
Total (CFS)			3.63

	V_{360}	V_{1440}	V_{4days}	V_{10days}
Cubic feet	5575.5	6599.6	7623.7	8848.1
Acre-ft	0.13	0.15	0.18	0.20

The 100 year peak flows for this developed site is 3.6 CFS and the existing flows are 2.7 CFS for an increase of 0.9 CFS. The 100 year 6 hr volume increase is 6600-3394 = 3206CF.

First Flush Ponding Requirement = A_d *0.46 in/12in/ft = 1024 CF



KEYED NOTES: ○

1. Pavement section per drawings and specs.
2. Finished grade.
3. Prepared subgrade.
4. 3/4" radius.
5. 1/2" radius.
6. Not used.
7. Concrete curb.
8. Not used.
9. Varies, depress as needed.
10. Not used.
11. Tack coat.

CURB & GUTTER CONSTRUCTION NOTES:

- A. Curbs, gutters & cut-off walls to be constructed of 3500 psi P.C.C unless otherwise noted.
- B. Edges not specifically dimensioned shall be edged with a 3/8" edging tool.
- C. Remove & replace 12" wide strip of pavement beyond lip of gutter when constructing curb & gutter adjacent to existing o.c. pavement.
- D. Dimensions at rounded corners measured to intersection of straight lines.
- E. For 6" curb & gutter provide control jts. @ 6' o.c. max, also provide 1/2" expansion jts. at 30' o.c. max, at curb returns, & at each side of driveways.
- F. For all other curbing provide control jts. @ 10' o.c., provide expansion jts. @ 50' o.c. & adjacent to buildings and walls.

CURB AND GUTTER DETAILS

