

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

December 20, 2018

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
Revised Grading and Drainage Plan
Engineer's Stamp Date 12/18/18 (File: H09D024A)

Dear Mr. Dourte:

Based on the submittal received on 12/18/18, the revised Grading and Drainage Plan is approved for Site Plan Building Permit (Administrative Amendment), Grading Permit, Building Permit and SO-19 Permit. Please ensure this Grading Plan is included in the Site Plan – Administrative Amendment request.

Prior to Certificate of Occupancy (For Information):

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
2. The sidewalk culverts must be inspected and approved by storm drain maintenance (Jason Rodriguez, jtrodriguez@cabq.gov or 857-8607).
3. The Drainage Covenant must be recorded with Bernalillo County and a copy included with the drainage certification.

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

Sincerely,

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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Burger King Restruant Building Permit #: _____ Hydrology File #: H09D24A

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Tract a2, Heritage Market Place Sub'd

City Address: 7900 Ladera drive NW

Applicant: RHD Engineering, LLC Contact: Richard Dourte

Address: 4305 Purple Sage Ave. NW, Alb. NM, 87120

Phone#: 505.288.1621 Fax#: _____ E-mail: rhengineering@outlook.com

Other Contact: Joe Simons Architecture Contact: Joe Simons

Address: PO Box 67408, Albuquerque NM, 87193-7406

Phone#: _____ Fax#: _____ E-mail: joe@simonsarchitecture.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? _____ ☒ Yes _____ No ☒ Commercial

DEPARTMENT _____ TRANSPORTATION _____ ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN Admin. Amend.
- _____ DRAINAGE REPORT
- _____ DRAINAGE MASTER PLAN
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ STREET LIGHT LAYOUT
- _____ 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) Admin. Amend.

DATE SUBMITTED: 12/18/18 By: Richard Dourte

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

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:

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. IT IS IDENTIFIED AS BASIN A4 WITHIN THE HERITAGE MARKET PLACE MASTER PLAN(H09-D024). BASIN A4 (PER THE AHYMO OUTPUT PAGE 5) ALLOTS 3.84 CFS FOR THIS PROPERTY (100YR, 6HR). THIS SITE GENERATES 3.58CF (100YR, 6HR) AS SHOWN ON SHEET 2. THUS THIS SITE COMPLIES WITH THE MASTER DRAINAGE PLAN.
3. THE REQUIRED FIRST FLUSH RETENTION IS 965CF. THE FIRST FLUSH POND VOLUME IS 1038CF, THUS ADEQUATE VOLUME IS RETAINED.
4. LANDSCAPED AREA = 38%
IMPERVIOUS AREA = 62%
5. THE VOLUME OF WATER GENERATED BY THIS SITE FOR THE 100YR 6HR RAIN FALL EVENT IS 5449.6 CF. THE PONDING CAPACITY FOR THIS SITE IS 4523CF+1010CF=5533CF, THUS ADEQUATE VOLUME IS PROVIDED FOR THIS RAIN FALL EVENT. THE EMERGENCY OVERFLOW IS THE SIDEWALK SIDEWALK CULVERT LOCATED AT THE SE CORNER OF THE SITE.

DRAINAGE NARRATIVE FOR AA:

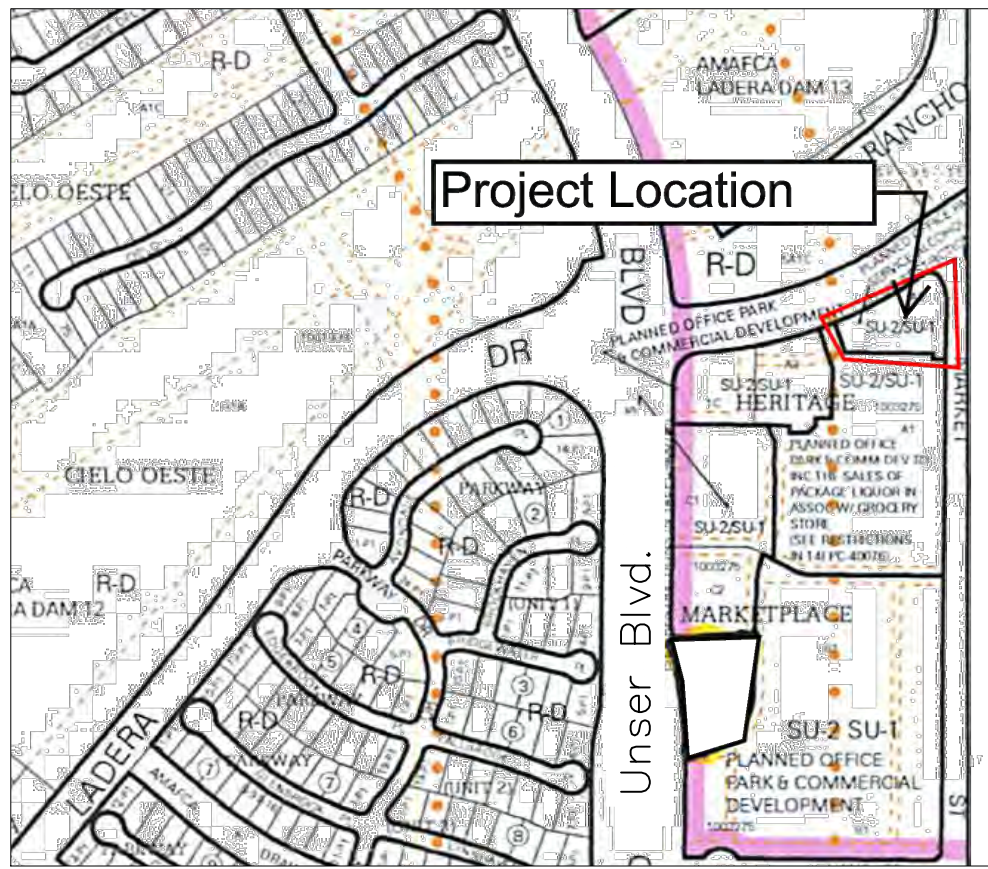
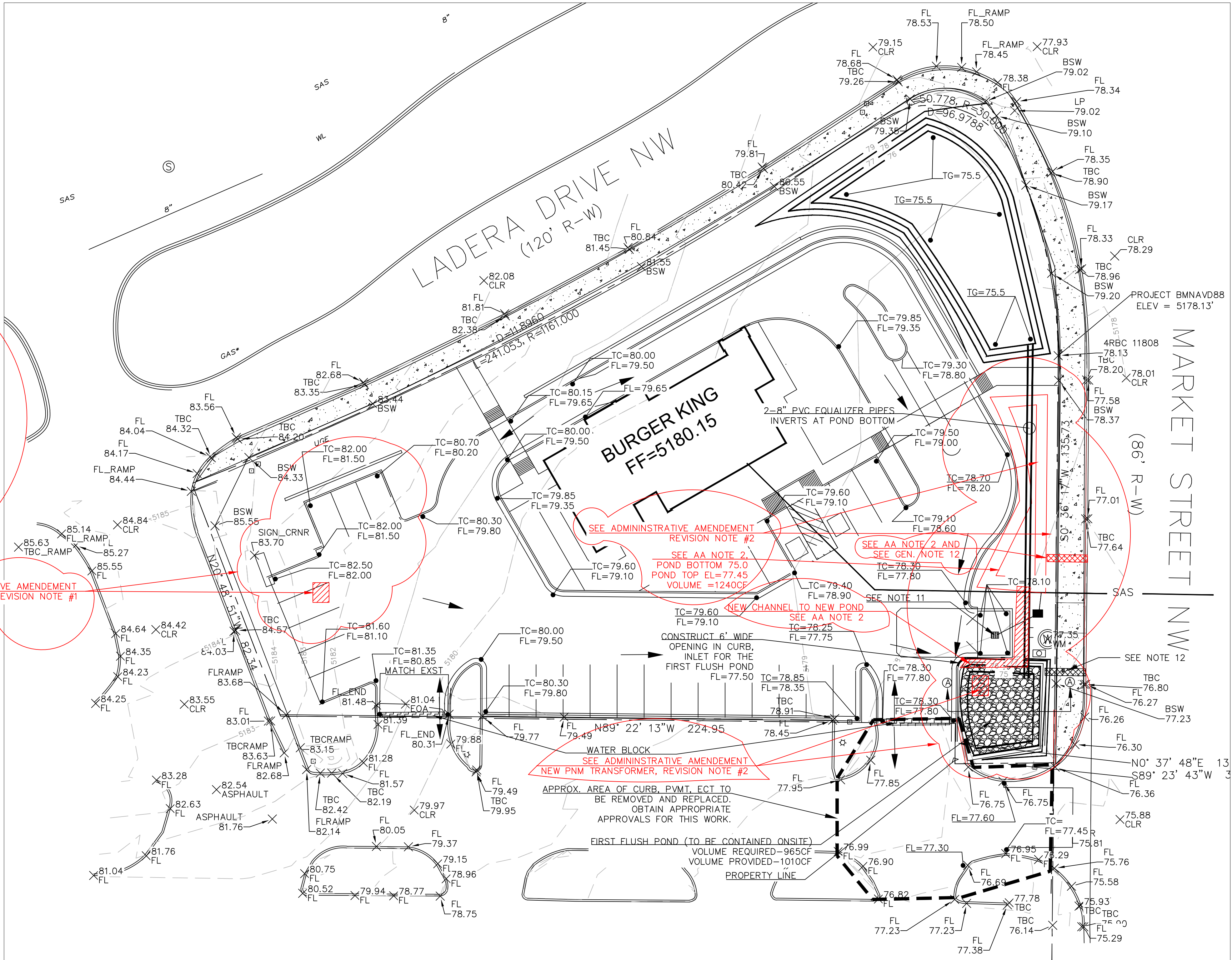
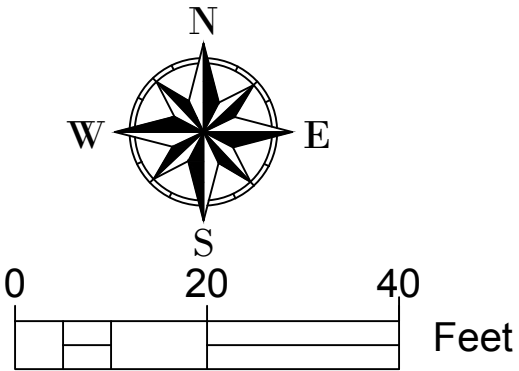
1. AN UNDER GROUND ELECTRICAL VAULT WAS UNCOVERED, THIS CREATED A NEED TO REMOVE A COUPLE OF PARKING SPOTS AND RAISE AREA.
2. THE INSTALLATION OF A PNM TRANSFORMER AT THE SE CORNER OF THE SITE, THUS THE SE POND AND THE OVERFLOW SDWK CULVERT NEEDED TO MOVE TO THE NORTH, AS SHOWN. THE NEW POND VOLUME IS 1240CF AND THE ORIGINAL POND VOLUME 1010CF. A NEW CHANNEL IS NEEDED FROM THE PARKING LOT OUTFALL TO THE NEW POND.

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.
11. BUILD 2'X2' INLET WITH GRATE (EL=78.00) AND CONNECT TO GREASE TRAP THEN TO SAS SEWER SERVICE LINE, IN ACCORANCE WITH APPLICABLE ABCVUA AND CITY OF ALBUQUERQUE CODES, STANDARDS AND REQUIREMENTS.
12. CONSTRUCT 1-2' SIDEWALK CULVERT PER STD DWG. 2236 (SO-19 REQUIRED, SEE NOTES ON SHEET 2) INV. IN = 77.45, INV. OUT = 76.32+ MATCH EXST. FL EXTEND STEEL COVER PLATE 1' PAST PROPERTY LINE, TACK WELD TIE DOWN BOLTS.

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 46" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQUIREMENTS

LEGEND

TC=46.00 FL=46.00	PROPOSED 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
Richard Dourte P.E. #10854

 Richard Dourte P.E. #10854	Title: BURGER KING 7900 LADERA DRIVE NW GRADING AND DRAINAGE PLAN REVISED APPROVED PLAN FOR ADMINISTRATIVE AMEND	DRAWN BY DATE
	RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	SHEET # 1 of 2 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* <i>A</i> a)+(E _b *A _b)+(E _c *A _c)+(E _d *A _d))/(A _a +A _b +A _c +A _d)
V ₃₆₀ =(Weighted E *P ₃₆₀)/12 in/ft
V ₁₄₄₀ = V ₃₆₀ +A _o *(P ₁₄₄₀ -P ₃₆₀)/12in/ft
V _{4days} =V ₃₆₀ +A _o *(P _{4day} -P ₃₆₀)/12in/ft
V _{10days} =V ₃₆₀ +A _o *(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

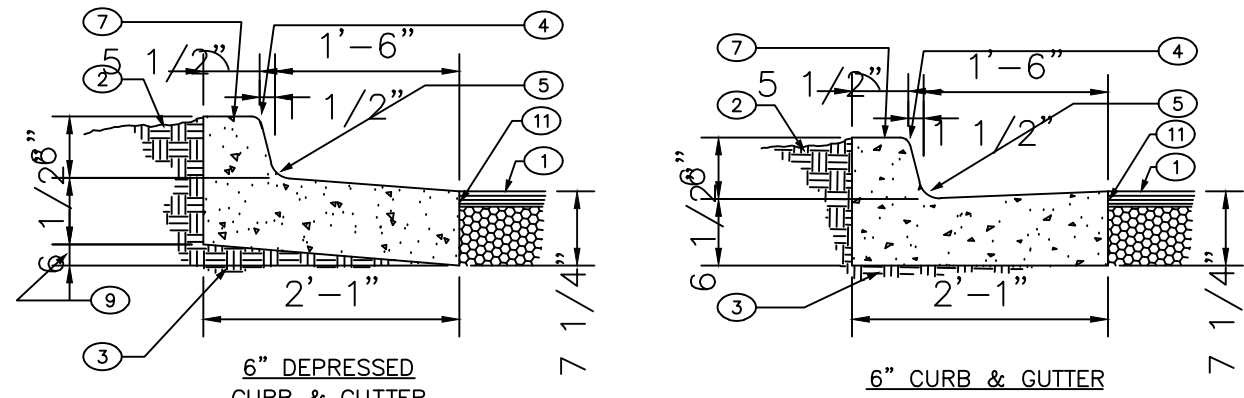
*****PROPOSED CONDITIONS*****		
Area	SQ. FT	Acres
A=	0	0.000
B=	0	0.000
C=	15964	0.366
D=	25173	0.578
Total	41137	0.944
Weighted E=		1.590

Design Flows (CFS)			
Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	15964	0.366	1.05
D=	25173	0.578	2.53
Total (CFS)			3.58

	V ₃₆₀	V ₁₄₄₀	V _{4days}	V _{10days}
Cubic feet	5449.6	6414.6	7379.5	8533.3
Acre-ft	0.13	0.15	0.17	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 5450-3394 = 2056CF.
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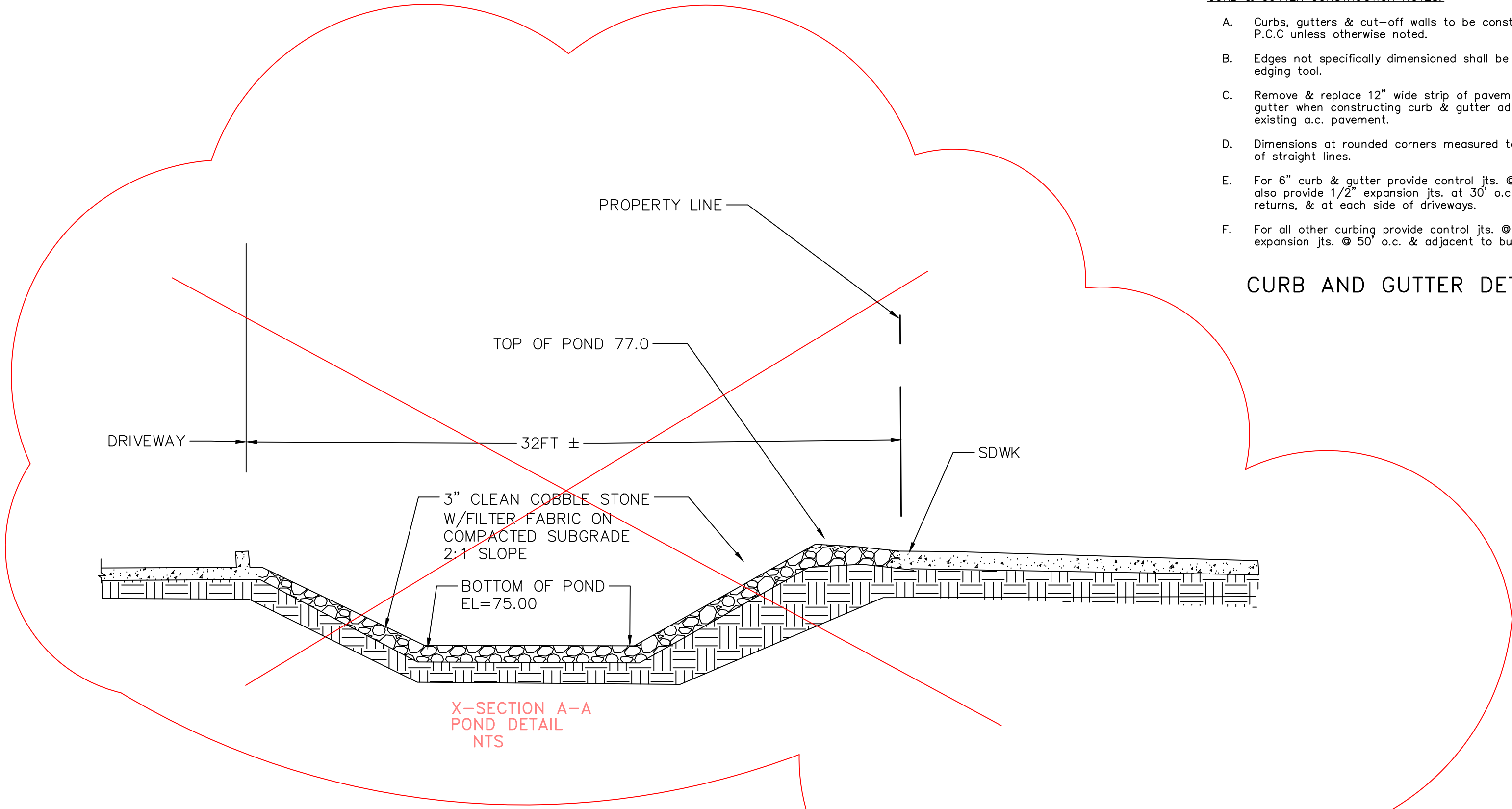
First Flush Ponding Requirement = A _o *0.46 in/12in/ft = 965 CF
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- KEYED NOTES: ○
1. Pavement section per drawings and specs.
 2. Finished grade.
 3. Prepared subgrade.
 4. 3/4" radius.
 5. 1 1/2" radius.
 6. Not used.
 7. Concrete curb.
 8. Not used.
 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 a.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



S.O.19 : NOTICE TO CONTRACTORS	
1	AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF -WAY.
2	ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THRU UPDATE #8.
3	TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (CALL 811) FOR LOCATION OF EXISTING UTILITIES.
4	PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIBY THE ENGINEER SO THAT THE CONFLICT CAN BE RESLOVED WITH A MINIMUM AMOUNT OF DELAY.
5	BACKFILL SOMPACTON SHALL BE ACCORDING TO TRAFFIC / STREET USE.
6	MAINTENANCE OF THESE FACILITIES SHALL BE TE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7	WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
8	THE WORK IN THE CITY ROW MUST BE INSPECTED AND ACCEPTED. THE CONTRACTOR MUST CONTACT JASON RODRIQUEZ AT 235-8016 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE INSPECTIONS.

SEE ADMININSTRATIVE AMENDEMENT
REVISION NOTE #1

ENGINEER'S SEAL	Title: BURGER KING 7900 LADERA DRIVE NW	DRAWN BY
	DETAILS	DATE
		CRD/eng
		SHEET #
	<i>Richard Dourte, LLC</i> 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	2 of 2 JOB # XXXX