## CITY OF ALBUQUERQUE

Planning Department David Campbell, Director



October 3, 2018

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

RE: Burger King – 5101 Gibson Blvd SE

**Grading and Drainage Plan** Engineer's Stamp Date: 09/26/18

Hydrology File: L18D084

Dear Mr. Dourte:

Based upon the information provided in your resubmittal received 09/28/2018, the Grading and PO Box 1293

Drainage Plan is approved for Building Permit and SO-19 Permit.

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.

Please provide Private Facility Drainage Covenant per Chapter 17 of the DPM prior to NM 87103

Permanent Release of Occupancy for the first flush pond. Please submit these to the 4th floor of

Plaza de Sol. A \$25 fee for each will be required.

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

Sincerely,

Albuquerque

Renée C. Brissette, P.E. CFM

Renée C. Brissette

Senior Engineer, Hydrology

Planning Department



## City of Albuquerque

#### Planning Department

## Development & Building Services Division

### DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Burger King Restruant	Building Permit #:	City Drainage #: L18D084
DRB#: EPC#:		Work Order#:
Legal Description: Lot 2, Block 26, Virginia Place A	Addition	
City Address: 5101 Gibson Blvd. SE		
Engineering Firm: RHD Engineering, LLC		Contact: - Richard Dourte
Address: 4305 Purple Sage Ave. NW Al	b. NM, 87120	
Phone#:505-288-1621 Fax#:		E-mail: rhdengineering@outlook.com
Owner:		Contact:
Address:		
Phone#: Fax#:		E-mail:
Architect: Joe Simons Architecture		Contact: Joe Simons
Address: PO Box 67408, Albuquerque NM, 871 Phone#: Fax#:		E-mail: joe@simonsarchitecture.com
		b-mail. Joe @ Simons architecture.com
		Contact:
Address:		P - th
Phone#: Fax#:		
Contractor:		Contact:
Address:		
Phone#: Fax#:	•	E-mail:
TYPE OF SUBMITTAL:	CHECK TYPE OF APPROV	AL/ACCEPTANCE SOUGHT:
DRAINAGE REPORT	SIA/FINANCIAL GUARAN	TEE RELEASE
DRAINAGE PLAN 1st SUBMITTAL	PRELIMINARY PLAT APPE	ROVAL
X DRAINAGE PLAN RESUBMITTAL	S, DEV. PLAN FOR SUB'D	APPROVAL
CONCEPTUAL G & D PLAN	S. DEV. FOR BLDG. PERMI	TAPPROVAL
GRADING PLAN	SECTOR PLAN APPROVAL	•
EROSION & SEDIMENT CONTROL PLAN (ESC)	FINAL PLAT APPROVAL	
ENGINEER'S CERT (HYDROLOGY)	CERTIFICATE OF OCCUPA	2. THE COURT OF THE STATE OF TH
CLOMR/LOMR	CERTIFICATE OF OCCUPA	NCY (TCL TEMP)
TRAFFIC CIRCULATION LAYOUT (TCL)	FOUNDATION PERMIT API	PROVAL
ENGINEER'S CERT (TCL)	X BUILDING PERMIT APPRO	VAL
ENGINEER'S CERT (DRB SITE PLAN)	GRADING PERMIT APPROV	VAL X SO-19 APPROVAL
ENGINEER'S CERT (ESC)	PAVING PERMIT APPROVA	AL ESC PERMIT APPROVAL
X SO-19	WORK ORDER APPROVAL	ESC CERT. ACCEPTANCE
OTHER (SPECIFY)	GRADING CERTIFICATION	OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	Yes X No Co	ppy Provided
DATE SUBMITTED: 9-27-18	By: Richard d	
-3-Z1-10	Richard Do	urte

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 followin

1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans

Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres Drainage Report: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more

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 I-acre than are part of a larger common plan of development

rhdengineering a outlook.com

September 19, 2018

Ms. Renee Brissette, PE Senior Engineer, Planning Department Development Review Services 600 Second Street City of Albuquerque, NM 87102

RE: 5101 Gibson Blvd SE (Burger King) (L18D084)

Dear Ms. Brissette,

Thank you for your comments dated Sept. 18, 2018 (copy enclosed) regarding the project referenced above. Your issues have been addressed as follows:

- 1. Bench mark information has been included.
- 2. FIRM map information has been added.
- 3. The storm water quality calculation has been changed.
- 4. Note for the dumpster has been changed.
- 5. Pavement hatching note has been added.
- Top of wall and flowline spot elevations have been added, along with the clarification of the section adjacent to the wall.
- 7. A curb has been added adjacent to the dumpster enclosure to keep storm water out of the dumpster area.

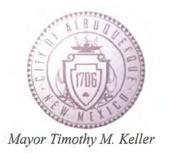
If you have any questions, please feel free to call me at 288-1621.

Sincerely,

Richard Dourte, PE RHD Engineering, LLC

## CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



September 18, 2018

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

RE: Burger King - 5101 Gibson Blvd SE

Grading and Drainage Plan Engineer's Stamp Date: 09/04/18

Hydrology File: L18D084

Dear Mr. Dourte:

PO Box 1293

Based upon the information provided in your submittal received 09/05/18, the Grading and Drainage Plan **is not** approved for Building Permit and SO-19 Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

- 1. Please provide the benchmark information for the survey contour information provided.
- 2. Please add the effective date of the FIRM Map to General Note #1.

NM 87103

www.cabq.gov

- 3. The storm water quality volume is calculated based on the 0.44 inch storm. To calculate the required storm water quality volume to be captured, multiply the impervious area (SF) by 0.34 inches for the 90th percentile storm. Please redo the first flush calculations. The required volume should be 9,572 CF.
- 4. Near the dumpster, please change the inlet reference note to note 8.
- 5. Please clarify what the hatching in the pavement on the West side of the building is.
- 6. Please add the top of wall and flow line information to the proposed garden/retaining wall. Also please clarify in the detail on Sheet 2 is the curb going to be right next to the wall or is the wall acting as the curb for the parking lot?
- 7. Near the dumpster, please redirect the sheet flow around the dumpster so that the runoff will discharge into the first flush pond and not the inlet that is in the dumpster enclosure.

# CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



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

Renée C Bressetts

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

DRAINAGE NARRATIVE:

- 1. THIS SITE IS LOCATED WITHIN AN X FLOOD PLAIN. REFER TO THE FEMA EXCERPT THIS SHEET.
- 2. THIS SITE IS IN A FREE DISCHARGE AREA.
- 3. LANDSCAPED AREA = 19%IMPERVIOUS AREA = 81%
- 4. THE VOLUME OF WATER GENERATED BY THIS SITE FOR THE 100YR 6HR RAIN FALL EVENT IS 6400CF.
- 5. THE FIRST FLUSH PONDING REQUIREMENT IS 798CF. THE PONDING PROVIDED IS 1259CF, THUS THE PONDING PROVIDED IS GREATER THAN THE REQUIRED PONDING.

# Project: BURGER KING -5101 GIBSON BLVD SE Drainage Calculations - Zone 2

	Deptl	n (inches) a	t 100yr Sto	rm	
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

			0.00		0.00
Weighted E	= ((EA* <b>A</b> A)+(E	Eв* <b>А</b> в) <b>+(Е</b> с* <b>А</b>	(c)+(Ed*Ad))	/(AA+AB+Ac	:+ <b>A</b> D)
V360=(Weig	hted E *P360	)/12 in/ft			
V1440= V360-	+AD*(P1440-P	з60 <b>)/12in/ft</b>			
V4days=V360-	+AD*(P4day-P	360)/ <b>12in/ft</b>			
V10days=V360	0 <b>+A</b> D*( <b>P</b> 10days	-P360)/12in/	/ft		

Exce	ess Precip	iation, I	E(inches) -	6 HR
		Trea	atment	
Zone	Α	В	С	D
1	0.44	0.67	0.99	1.97
2	0.53	0.78	1.13	2.12
З	0.66	0.92	1.29	2.36
4	0.80	1.08	1.46	2.64

Peak Discharge (CFS/ACRE) 100 YR				
		Trea	atment	
Zone	Α	В	С	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

#### 

Area	SQ.	FT	Acres
Α=	C	)	0.000
B=	C	)	0.000
C=	145	500	0.333
D=	216	583	0.498
Total	361	.83	0.831
Weighted E=		1.9	31

	Design Flows (100YR)				
Area	SQ. FT Acres		Peak Discharge (CFS)		
A=	0	0.000	0.00		
B=	0	0.000	0.00		
C=	14500	0.333	1.15		
D=	21683	0.498	2.50		
Total (CFS)		-S)	3.65		

	V360	V1440	V4days	V10days
Cubic feet	5823	6727	8262	9979
Acre-ft	0.13	0.15	0.19	0.23

### \*PROPOSED CONDITIONS

Area	SQ.	FT	Acres
A=	C	)	0.00
B=	C	)	0.00
C=	8030		0.18
D=	28153		0.64
Total	36183		0.83
Weighted E=		2.1	.23

		Design Fl	ows (100YR)
Area	SQ. FT	Acres	Peak Discharge (CFS)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	8030	0.184	0.64
D=	28153	0.646	3.24
	Total (CFS)		3.88

	<b>V</b> 360	V1440	<b>V</b> 4days	V10days
Cubic feet	6400	7573	9567	11796
Acre-ft	0.15	0.17	0.22	0.27

The 100 year peak flows for this developed site is 3.9 CFS and the existing flows are 3.6 CFS for an increase o 0.3 CFS. The 100 year 6 hr volume increase is 6400-5823 = 577CF.

First Flush Ponding Requirement = Ap \*0.34 in/12in/ft = 798 CF

BENCH MARK INFORMATION: SAS MANHOLE RIM IN ORTIZ DRIVE, ELEVATION = 5314.67.

## GENERAL NOTES:

1. THIS SITE IS LOCATED IN A ZONE X, FEMA FLOOD HAZARD ZONE ( REFER TO THE FIRM MAP 35001C0362H,( EXCERPT ATTACHED) EFFECTIVE DATE 8/16/2012.

2. RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.

3. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.

4. 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.

5. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.

6. THE SURVEY INFORMATION WAS PROVIDED BY CONSTRUCTION SURVEY TECHNOLOGIES,

7. FOR SITE DIMENSIONS, BUILDING AND INFRASTRUCTURE LOCATION REFER TO THE SITE PLAN.

8. BUILD 2'X2' INLET WITH GRATE (EL=10.15) AND CONNECT TO GREASE TRAP THEN TO SAS SEWER SERVICE LINE, IN ACCORANCE WITH APPLICABLE ABCWUA AND CITY OF ALBUQUERQUE CODES, STANDARDS AND REQUIREMENTS.

9. CONSTRUCT 1-2' SIDEWALK CULVERT PER STD DWG. 2236 (SO-19 REQUIRED, SEE NOTES ON SHEET 2) INV. IN = 8.25, INV. OUT = 8.04± MATCH EXST. FL EXTEND STEEL COVER PLATE 1' PAST PROPERTY LINE, TACK WELD TIE DOWN BOLTS.

WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING

ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS

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.

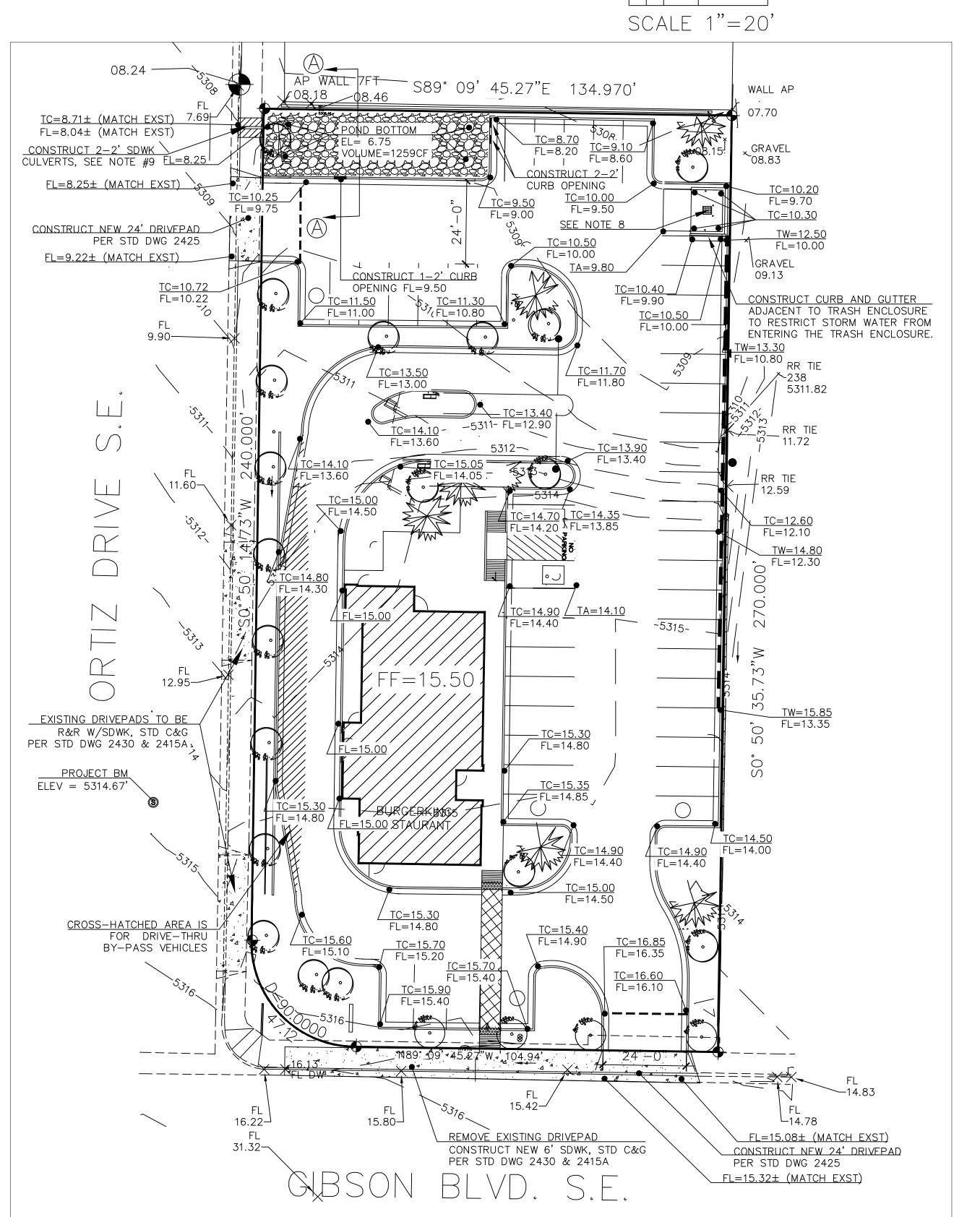
EROSION CONTROL NOTES:

PERMIT PRIOR TO BEGINNING WORK.

RESPONSIBILITY OF THE CONTRACTOR.

INTO EXISTING RIGHT-OF-WAY.

CONSTRUCTION.





VICINITY MAP



35001C0362H

LEGAL DESCRIPTION:

LOT 2. BLOCK 26. VIRGINIA PLACE ADDITION.

CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

<u>FIRM MAP:</u>

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE

2. RETAIN THE FIRST .46" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO

# LEGEND

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

I HAVE PERSONALLY INSPECTED THE PROPERTY ON 7-17-18. NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE richard doute

---- PROPOSED BASIN BOUNDARY/WATER BLOCK

ENGINEER'S SEAL 9/26/18

Richard Dourte P.E. #10854

Richard Dourte P.E. #10854

DRAWN Title: BURGER KING |5101 GIBSON BLVD SE DATE GRADING AND DRAINAGE PLAN

RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621

JOB #

SHEET #

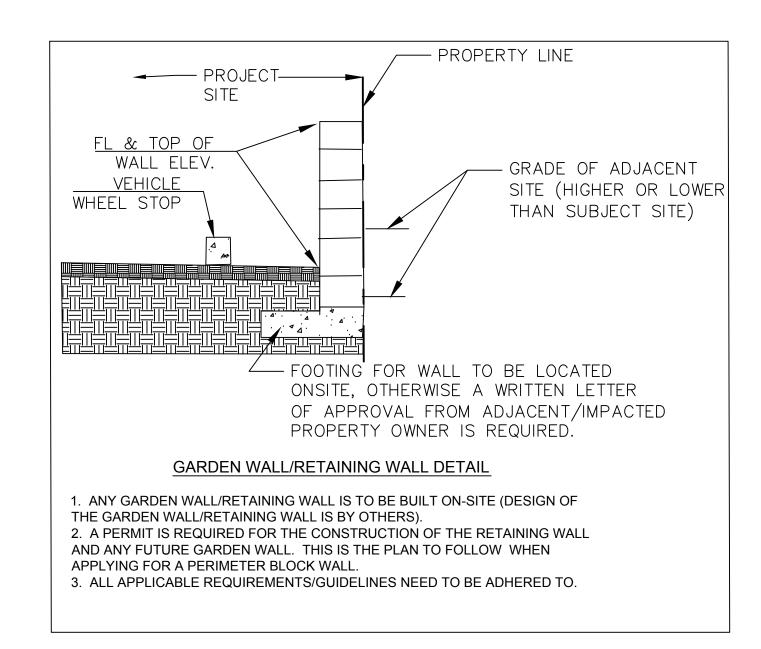
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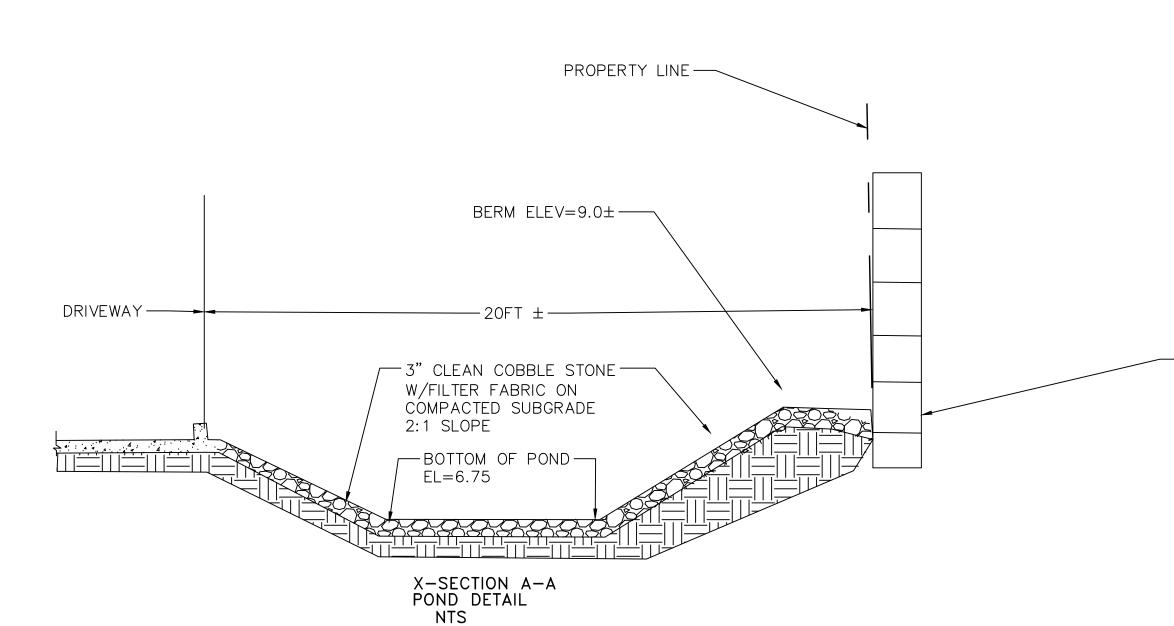
## WEIR CALCULATIONS

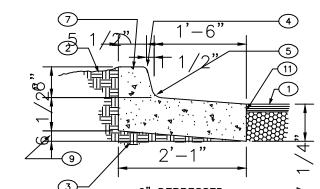
Q=CLH^3/2 C=3.2 L=2.0' H=0.5'

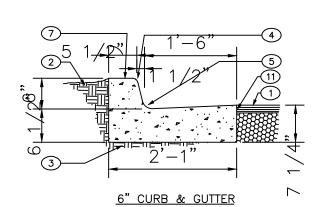
Q=3.2(2.0)((0.5)^1.5)= 2.3CFS PER SIDEWALK CULVERT

THIS SITE GENERATES 3.88CFS FOR THE 100YR, 6HR EVENT, THUS 2 SIDEWALK CULVERTS ARE NEEDED.









<u>6" DEPRESSED</u> CURB & GUTTER

#### KEYED NOTES:

drawings and specs.

Finished grade.

Prepared subgrade.

1 1/2" radius.

Noť used.

8. Not used.

Concrete curb.

as needed. 10. Not used. 11. Tack coat.

9. Varies, depress

#### CURB & GUTTER CONSTRUCTION NOTES:

A. Curbs, gutters & cut—off walls to be constructed of 3500 psi P.C.C unless otherwise noted.

1. Pavement section per

- B. Edges not specifically dimensioned shall be edged with a 3/8"
- 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

-EXISTING BLOCK WALL

# S.O.19 : NOTICE TO CONTRACTORS

- AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF -WAY.
- 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 EDICTION AS REVISED THRU UPDATE #8.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (CALL 811) FOR LOCATION OF EXISTING UTILITIES.
- 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.
- BACKFILL SOMPACTION SHALL BE ACCORDING TO TRAFFIC / STREET
- MAINTENANCE OF THESE FACILITIES SHALL BE TE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
- 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.

ENGINEER'S SEAL
9/26/18

Richard Dourte P.E. #10854

Title:	BURGEI	R KINC	r I	
5101	GIBSON	BLVD	SE	

DETAILS

RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621

2 of 2 JOB # XXXX

DRAWN

DATE

G&D.dwg

SHEET #