

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

August 24, 2023

Troy Kelts, P.E.
Galloway & Company
6162 S Willow Drive, Suite 320
Greenwood Village, CO 80111

**RE: Take 5 – Gibson
Conceptual Grading & Drainage Plan
Engineer's Stamp Date: 08/02/23
Hydrology File: M15D021E**

Dear Mr. Kelts:

Based upon the information provided in your submittal received 08/03/2023, the Conceptual Grading & Drainage Plan is preliminary approved for action by the Development Facilitation Team (DFT) on Site Plan for Building Permit.

PRIOR TO BUILDING PERMIT:

1. Please submit a more detailed Grading & Drainage Plan to Hydrology for review and approval. This digital (.pdf) is emailed to PLNDRS@cabq.gov along with the Drainage Transportation Information Sheet.

As a reminder, 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.

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 10/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: _____ 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: _____ **By:** _____

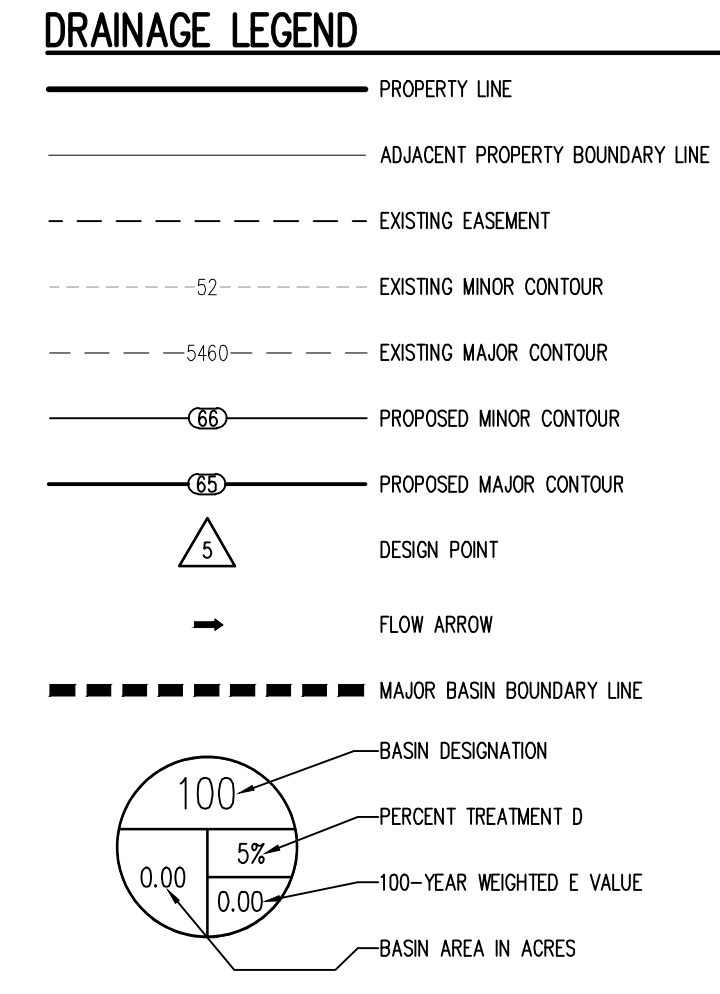
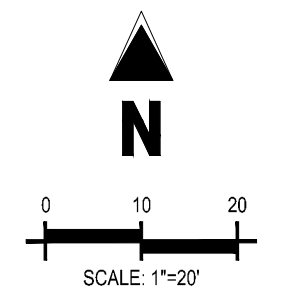
COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

GIBSON BLVD SOUTHEAST
PUBLIC RIGHT OF WAY

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 08/24/23
BY: *Roger J. Kelts*
HydroTrans # M15D021E
THESE PLANS AND/OR REPORT ARE
CONCEPTUAL ONLY. MORE INFORMATION MAY
BE NEEDED IN THEM AND SUBMITTED TO
HYDROLOGY FOR BUILDING PERMIT APPROVAL.



PROPOSED DRAINAGE:

THE PROPOSED SITE IS APPROXIMATELY 0.422 ACRES. THE PROPOSED DEVELOPMENT CONSISTS OF A DRIVE-THRU OIL CHANGE FACILITY AND ASSOCIATED INFRASTRUCTURE. THIS REPORT WILL COMPLY WITH M15D021 CONCEPTUAL MASTER GRADING & DRAINAGE PLAN PREPARED WITH THE OVERALL DEVELOPMENT LEVELACE HEIGHTS ADDITION. ADJACENT SITE LAYOUTS ARE SHOWN FOR CONTEXT ONLY AND ARE NOT A PART OF THIS GRADING & DRAINAGE PLAN.

BASIN "102" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.93 CFS, WHICH IS ASSUMED TO BE DIRECTED NORTHWEST, WHERE IT SHALL BE DIRECTED INTO WATER QUALITY POND 1 THEN OVERFLOWING INTO THE PRIVATE DRIVE AISLE.

BASIN "104" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.24 CFS, WHICH IS ASSUMED TO BE DIRECTED NORTHWEST, WHERE IT SHALL FLOW OFFSITE INTO THE SHARED PRIVATE DRIVE AS EXISTING BASIN XXX IN THE CONCEPTUAL MASTER GRADING & DRAINAGE PLAN.

BASIN "106" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.41 CFS, WHICH IS ASSUMED TO BE DIRECTED NORTHWEST, WHERE IT SHALL BE DIRECTED INTO WATER QUALITY POND 2 THEN OVERFLOWING INTO THE GIBSON RIGHT-OF-WAY THROUGH THE EXISTING 2X 2' SIDE WALK CULVERTS.

BASIN "108" WILL GENERATE A 100-YR, 6-HOUR FLOW OF 0.07 CFS, WHICH IS ASSUMED TO BE DIRECTED NORTH, WHERE IT SHALL FLOW DIRECTLY INTO THE GIBSON RIGHT-OF-WAY.

BASIN "202" CORRESPONDS WITH OFFSITE PORTIONS OF EXISTING BASIN 406 ON LOT C2. BASIN 202 WILL GENERATE A 100-YR, 6-HOUR FLOW OF 1.24 CFS, WHICH IS ASSUMED TO BE DIRECTED WEST INTO BASIN 102, THEN FOLLOW THE DRAINAGE PATTERN ASSOCIATED WITH BASIN 102.

BASIN "204" CORRESPONDS WITH OFFSITE PORTIONS OF EXISTING BASIN 408 ON LOTS C2 AND D. BASIN 204 WILL GENERATE A 100-YR, 6-HOUR FLOW OF 3.19 CFS, WHICH IS ASSUMED TO BE DIRECTED WEST INTO BASIN 106, THEN FOLLOW THE DRAINAGE PATTERN ASSOCIATED WITH BASIN 106.

THE TOTAL DISCHARGE INTO THE GIBSON RIGHT-OF-WAY SHALL BE LESS THAN THE DISCHARGE IN THE EXISTING CONDITIONS DUE TO THE INCREASE IN LANDSCAPED AREA ONSITE.

- PRIVATE DRAINAGE FACILITIES WITHIN CITY ROW:**
NOTICE TO CONTRACTOR (SPECIAL ORDER 19 "50-10")
- CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A MEETING PRIOR TO FORMING.
 - AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
 - 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.
 - 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.
 - PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD SO THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY.
 - BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
 - MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
 - WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
 - CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A CONSTRUCTION INSPECTION. FOR EXCAVATING AND BARRICADING INSPECTIONS, CONTACT CONSTRUCTION COORDINATION AT (505) 924-3416.

Weighted E Method (Developed)

Basin	Area (sf)	Area (ac)	Treatment				100-Year		10-Year							
			%	acres	%	acres	Weighted E (in)	Volume (ac-ft)	Flow (cfs)	Weighted E (in)	Volume (ac-ft)	Flow (cfs)				
102	10,410	0.24	0.00%	0	0.00%	0	33.47%	0.08	66.53%	0.16	1.895	0.453	0.93	1.165	0.278	0.56
104	2,528	0.06	0.00%	0	0.00%	0	17.23%	0.01	82.77%	0.05	2.106	0.122	0.24	1.333	0.077	0.15
106	4,263	0.10	0.00%	0	0.00%	0	10.22%	0.01	89.78%	0.09	2.197	0.215	0.41	1.405	0.137	0.25
108	952	0.02	0.00%	0	0.00%	0	77.76%	0.02	22.24%	0.00	1.319	0.029	0.07	0.709	0.016	0.04
202	13,893	0.32	0.00%	0	0.00%	0	34.49%	0.11	65.51%	0.21	1.882	0.600	1.24	1.155	0.368	0.74
204	33,197	0.76	0.00%	0	0.00%	0	11.81%	0.09	88.19%	0.67	2.176	1.659	3.19	1.388	1.058	1.96
Total	65,244	1.50														

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / Total Area

Volume = Weighted E * Total Area

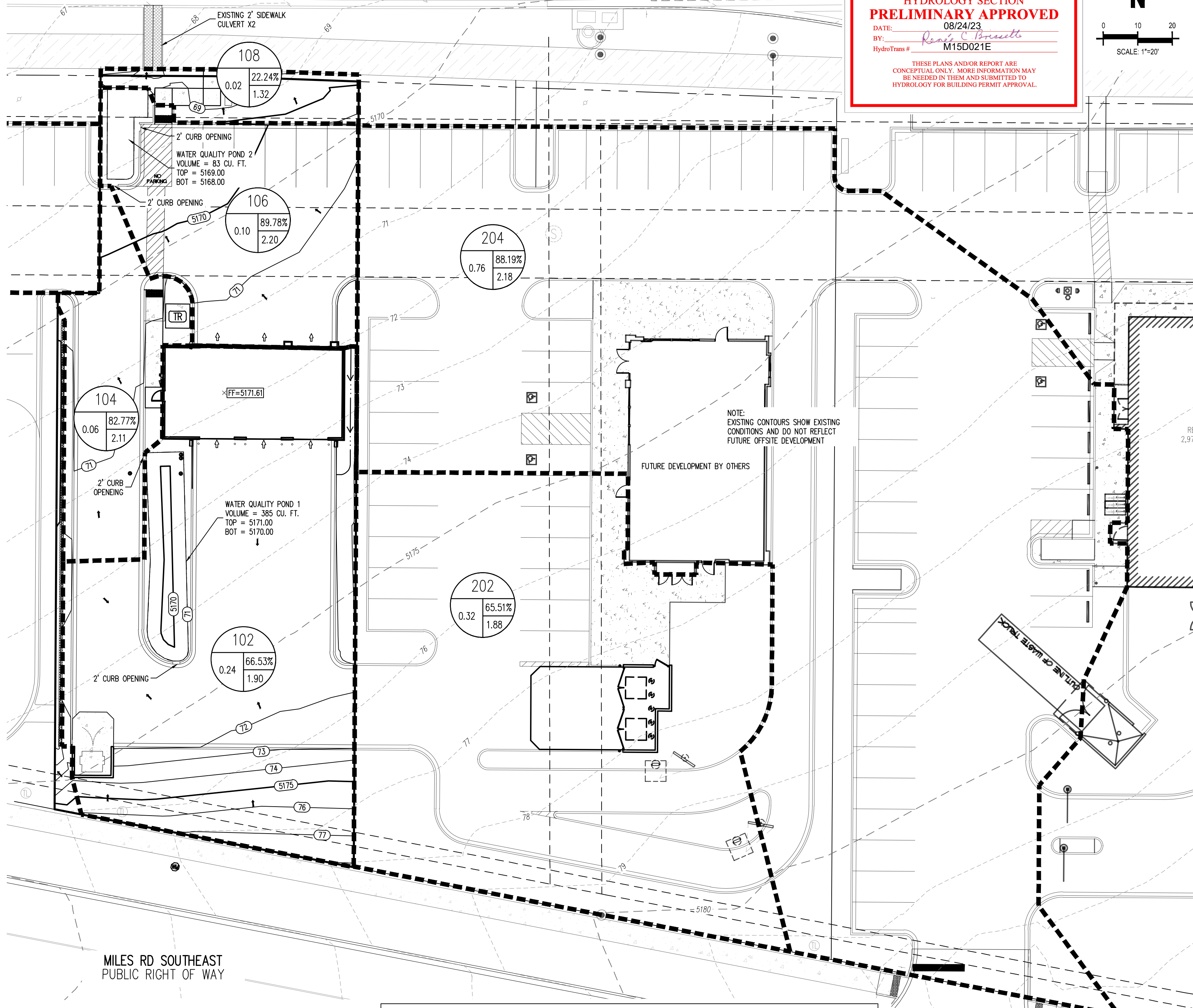
Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

Zone 2	100-Year	10-Year
Ea	0.62	0.15
Eb	0.80	0.30
Ec	1.03	0.48
Ed	2.33	1.51

Zone 2	100-Year	10-Year
Qa	1.71	0.41
Qb	2.36	0.95
Qc	3.05	1.59
Qd	4.34	2.71

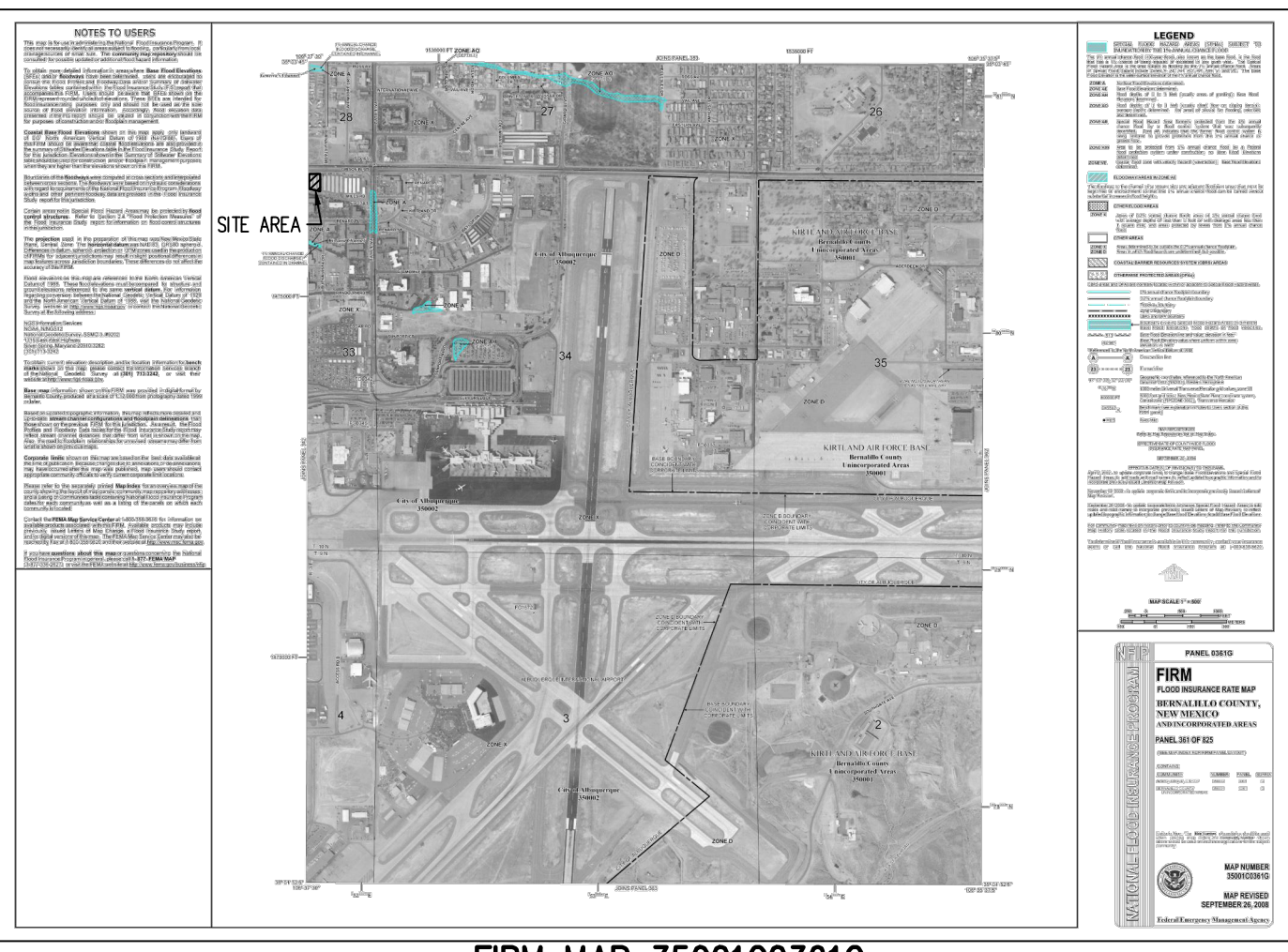
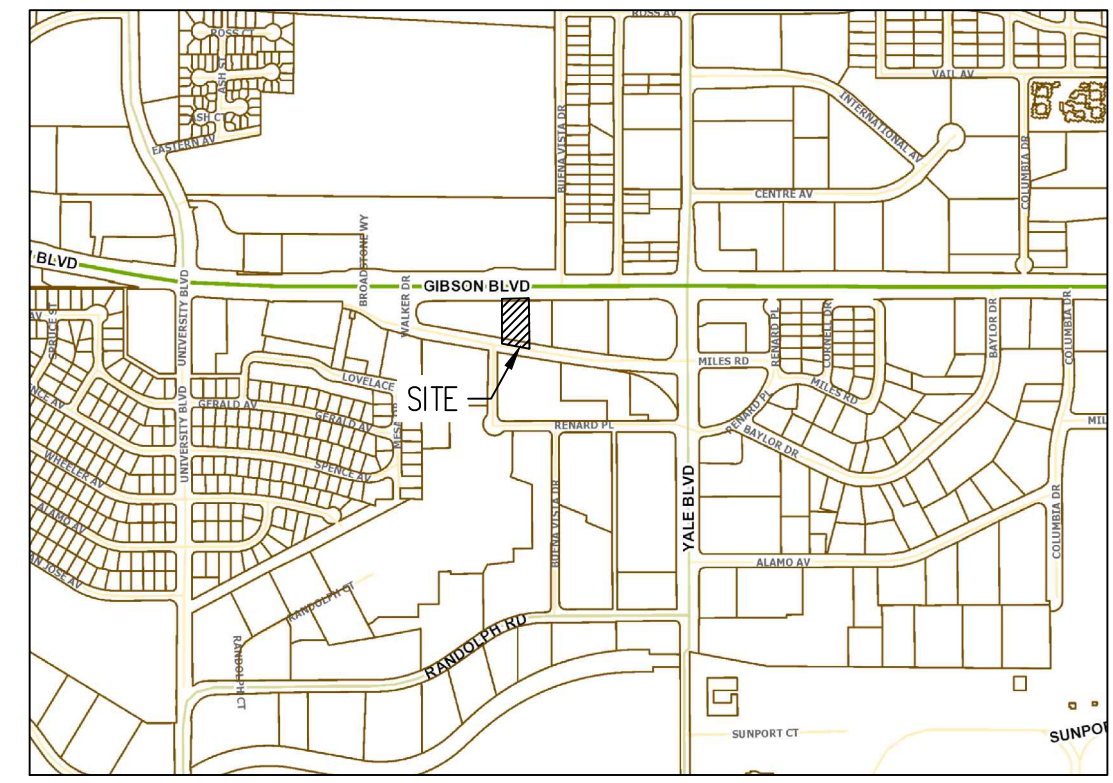
Water Quality Calculations Note: For redevelopment site, SWQV = 0.26 in

Lot	Impervious Area (sf)	SWQV (in)	Storm Water Quality Vol Required (cf)	Storm Water Quality Vol required (ac-ft)
102	7,068	0.26	153	0.004
106	3,816	0.26	83	0.002
Total	10,884		236	0.005



NOTE: EXISTING CONTOURS SHOW EXISTING CONDITIONS AND DO NOT REFLECT FUTURE OFFSITE DEVELOPMENT

FUTURE DEVELOPMENT BY OTHERS



NOTE:
ADJACENT LOT LAYOUTS ARE CONCEPTUAL AND SHOWN FOR CONTEXT ONLY. THEY ARE NOT A PART OF THIS DEVELOPMENT AND WILL NOT BE APPROVED WITH THIS GRADING & DRAINAGE PLAN.

WATER QUALITY NOTE:
POND SIDE SLOPES NEED TO BE STABILIZED WITH NATIVE GRASS SEED WITH AGGREGATE MULCH OR EQUAL (MUST SATISFY THE FINAL STABILIZATION CRITERIA GCP 2.2.14.B).

Curb Chase Capacity

Weir Equation:

$$Q = CLH^{3/2}$$

Q = Flow
C = 2.95
L = Length of weir
H = Height of weir

2' Curb Chase Capacity (8" Curb)
Q = 2.95*2*0.583^{3/2}
Q = 2.63 cfs

Basin	Required Equivalent Curb Opening			
	10-Year Flow (cfs)	Number of 2' Curb Openings	Equivalent Open Length (ft)	Actual Flow Capacity (cfs)
EX. CURB CHASE	2.25	2	4	5.26

Ex. Curb chase receives flow from basins 106, 108, and 204

Note: Due to the temporary conditions shown in this plan, sidewalk culverts were sized using 10-year flows.

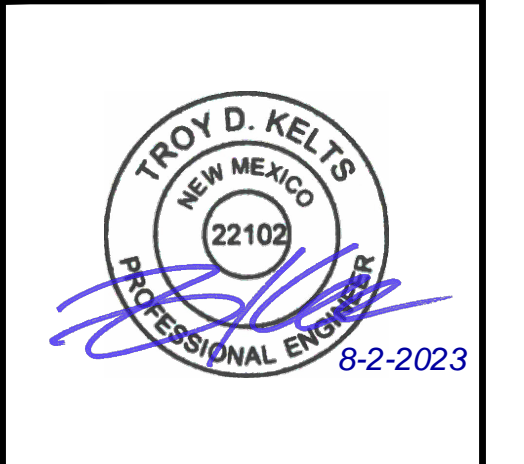
EXISTING DRAINAGE:
THIS SITE IS CURRENTLY DEVELOPED AND USED AS AIRPORT PARKING, CONSISTING ASPHALT DRIVES. ALMOST THE ENTIRETY OF THE LOT IS IMPERVIOUS AREA. THE SITE IS BOUNDED BY GIBSON BLVD TO THE NORTH, MILES RD TO THE SOUTH, AND FUTURE COMMERCIAL DEVELOPMENT TO THE EAST AND WEST. THE SITE IS APPROXIMATELY 0.422 ACRES AND DRAINS FROM SOUTHEAST TO NORTHWEST, FREE RELEASING INTO GIBSON BLVD THROUGH SEVERAL SIDEWALK CULVERTS. THE SITE IS NOT LOCATED IN A FLOODPLAIN AS SHOWN ON THE FIRM MAP (SEE THIS SHEET). THE PROJECT DOES NOT RECEIVE OFFSITE FLOWS. THIS SITE WILL CONFORM WITH THE CONCEPTUAL MASTER GRADING & DRAINAGE PLAN M15D021.



CALL NM ONE-CALL
SYSTEM SEVEN (7) DAYS
PRIOR TO ANY EXCAVATION

Galloway
CONSULTANTS
5500 Greenwood Plaza Blvd
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

BENCH MARKS
VERTICAL DATUM IS BASED UPON ALBUQUERQUE CONTROL SURVEY MONUMENT "ACS BM 24-L-16". ELEVATION = 5191.31 FEET (NAVD 88)



NO.	DATE	DESCRIPTION	BY
1	08/04/2023	1ST SUBMITTAL	DDJ
		AS-BUILT INFORMATION	
		CONTRACTOR:	
		WORK STAKED BY:	
		INSPECTOR'S ACCEPTANCE BY:	
		FIELD VERIFICATION BY:	
		DRAWINGS CORRECTED BY:	

LOVELACE HEIGHTS ADDITION
CITY OF ALBUQUERQUE
2151 GIBSON BOULEVARD

GRADING & DRAINAGE PLAN

DESIGNED BY: DDJ
DRAWN BY: HCH
CHECKED BY: TDK
DATE: 08/04/2023

DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL
ZONE MAP NO. M-15 & L-15
CITY PROJECT NO.
SHEET NO. 1 OF 1