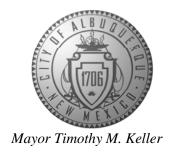
CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



November 21, 2018

Matt Satches, P.E. Bohannan Huston, Inc. 7500 Jefferson St NE Albuquerque, NM 87109

RE: Westgate Community Center 10001 DeVargas Rd SW Conceptual Grading and Drainage Plan Engineer's Stamp Date: 11/9/18 Hydrology File: M09D030

Dear Mr. Satches:

PO Box 1293

Based on the submittal received on 11/9/18, the Grading and Drainage Plan cannot be approved until the following corrections are made:

Prior to Site Plan:

Albuquerque

1. Show all public improvements along DeVargas; the grading around the entrances and ponds 2 and 3 will need to be adjusted to accommodate the new road.

NM 87103

2. Provide freeboard around pond 1, especially along the east property line to ensure the emergency overflow will be engaged in case of overtopping. Provide capacity calculations for the emergency spillway, sized for the 100-yr peak inflow and specify Std Dwg 2260 for the channel.

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- 3. The sidewalk culvert/channel out to DeVargas for pond 3 is unnecessary and should be removed; if overtopped, pond will discharge to the ROW no matter what.
- 4. Provide the volume for the basin A-3 pond; this should exceed the 100-yr, 10day volume for the contributing area.

Prior to Building Permit (For information):

- 5. Provide hydraulic calculations for the riprap swale along the north side of the project, the concrete rundowns into ponds 2 and 3.
- 6. Include a note that *no work shall be allowed in the public ROW without an approved Work Order*.

CITY OF ALBUQUERO

Planning Department David Campbell, Director



Mayor Timothy M. Keller

- 7. Will the basin B-2 area be used for staging? It needs to be reseeded if so; specify reseeding per section 1012 for all disturbed areas.
- 8. This project requires an ESC Plan, submitted to the Stormwater Quality Engineer (Curtis Cherne PE, ccherne@cabq.gov or 924-3420).
- 9. 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 (For Information):

- 10. Engineer's Certification, per the DPM Chapter 22.7: Engineer's Certification Checklist For Non-Subdivision, will be required.
- 11. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

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

PO Box 1293

Sincerely,

Albuquerque

NM 87103

Dana M. Peterson

Senior Engineer, Planning Dept. **Development Review Services**

www.cabq.gov



Engineering Spatial Data Advanced Technologies

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

www.bhinc.com

voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332

CLIENT/COURIER TRANSMITTAL

То:	City of Albuquer Planning Depart 600 2nd St. NW Albuquerque, NI	ment	Requested by: Date: Time Due:	Matthew Satches 11-09-2018 This A.M. This P.M. Rush By Tomorrow Westgate Community Center		
Phone: Job No.:	505-924-3895 20191064		Job Name:			
	UPS	ral Express	PICE	<u>CUP</u>		
1 2 3 4 5 6 7 8	QUANTITY 1 1 1 1 1 1 1 1 1	DESCRIPTION C-001 Drainage Mar C-100 Overall Gradin C-101 Grading and I C-102 Grading and I C-103 Grading and I Drainage and Transp Printed Copy of Emaz Zone Atlas Page	ng and Drainage F Drainage Plan: So Drainage Plan: Ea Drainage Plan: We portation Informati	uth st est		

COMMENTS / INSTRUCTIONS

Please find attached our Hydrology submital for the Westgate Community Center. We are requesting COA Hydrology Site Plan for Building Permit Approval

REC'D BY:	DATE:	TIME:



City of Albuquerque

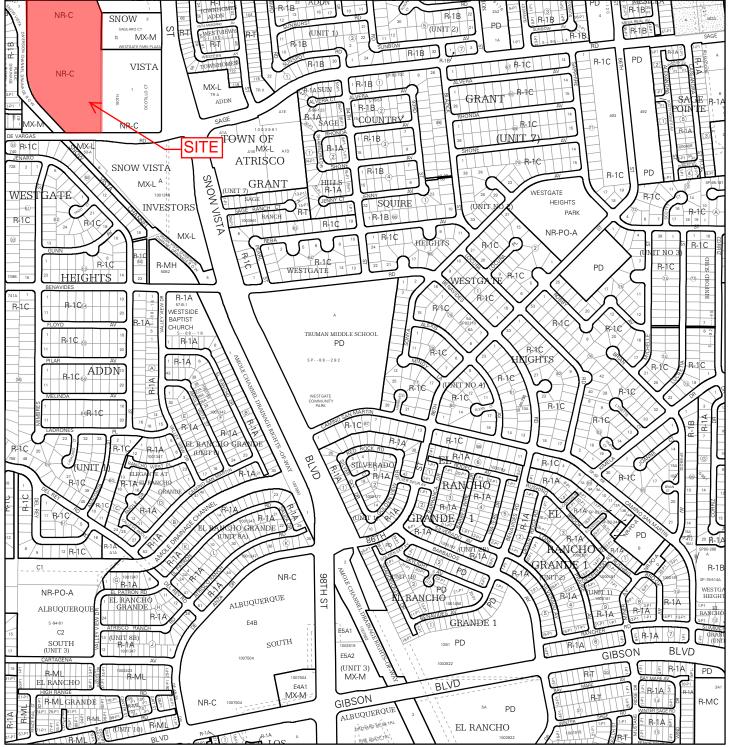
Planning Department

Development & Building Services Division

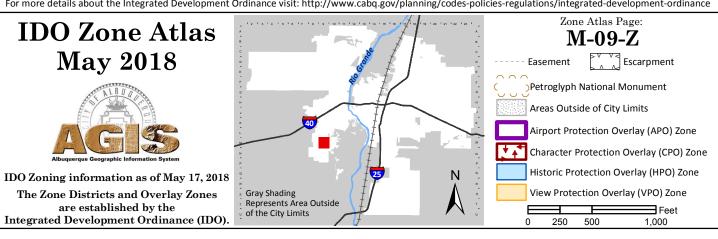
DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

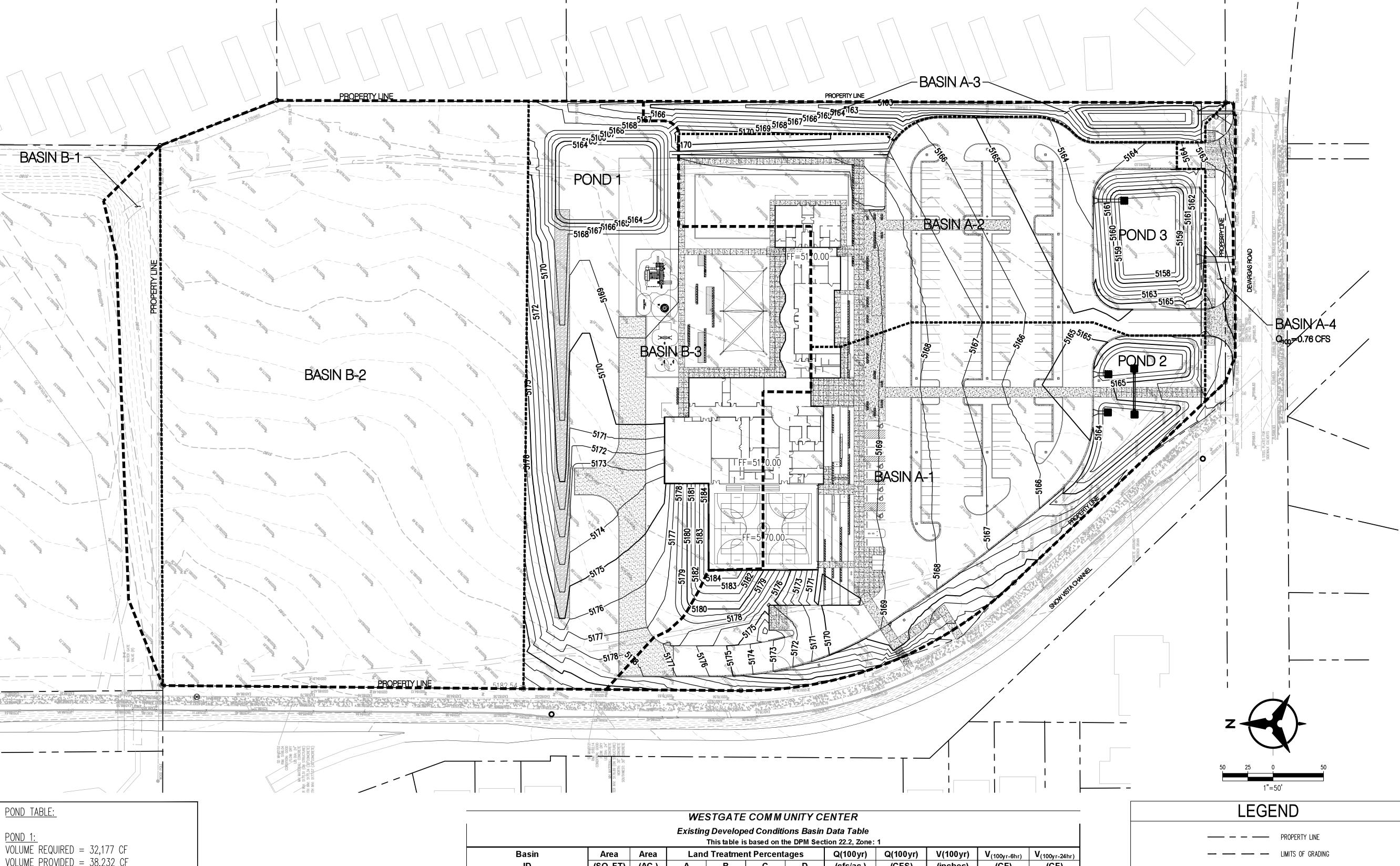
Project Title: Westgate Community Center	Building Permit #:	Hydro	Hydrology File #:			
DRB#:	_ EPC#:	Work	Work Order#:			
Legal Description:TR OF LAND WITHIN NW/4 NW/4 NW/4 E	XC A S'WLY POR SEC 33 T10NR2E (AKA	PARCEL 1 SURVEY OF TOWN OF ATRIS	CO GRANT) CONT 12.8369 AC M/L			
City Address: 10001 De Vargas Road SW 87121						
Applicant: Bohannan Huston		Contact:	Matt Satches			
Address: 7500 Jefferson St NE, Albuquerque, N	M 87109					
Phone#: 505-923-3315	_Fax#:	E-mail:	msatches@bhinc.com			
Other Contact: Lee Gamelsky Architects		Contact:	Lee Gamelsky			
Address: 2412 Miles Rd. SE Albuquerque, NM 87	7106					
Phone#: 505.842.8865	Fax#:	E-mail:	lee@lganm.com			
TYPE OF DEVELOPMENT: PLAT	RESIDENCE	✓ DRB SITE	ADMIN SITE			
Check all that Apply:						
TRAFFIC/ TRANSPORTATION TYPE OF SUBMITTAL: □ ENGINEER/ARCHITECT CERTIFICATION □ PAD CERTIFICATION □ CONCEPTUAL G & D PLAN □ GRADING PLAN □ DRAINAGE REPORT □ DRAINAGE MASTER PLAN □ FLOODPLAIN DEVELOPMENT PERMIT A □ ELEVATION CERTIFICATE □ CLOMR/LOMR □ TRAFFIC CIRCULATION LAYOUT (TCL) □ TRAFFIC IMPACT STUDY (TIS) □ STREET LIGHT LAYOUT □ OTHER (SPECIFY) □ PRE-DESIGN MEETING?	APPLIC	BUILDING PERMIT APPL CERTIFICATE OF OCCU PRELIMINARY PLAT AI SITE PLAN FOR SUB'D SITE PLAN FOR BLDG. FINAL PLAT APPROVA SIA/ RELEASE OF FINAL FOUNDATION PERMIT APPL GRADING PERMIT APPL SO-19 APPROVAL PAVING PERMIT APPROVAL PAVING PERMIT APPROVAL GRADING/ PAD CERTIF WORK ORDER APPROVA CLOMR/LOMR FLOODPLAIN DEVELOP OTHER (SPECIFY)	PANCY PPROVAL APPROVAL PERMIT APPROVAL L NCIAL GUARANTEE APPROVAL ROVAL OVAL FICATION L PMENT PERMIT			
IS THIS A RESUBMITTAL?: Yes You N	0	erikus zakolo kazari iku z 6 40 prokade nafeliko od 640 od 660 6 70				
DATE SUBMITTED: 11-09-2018	By: Lee Gamelsky					
COA STAFF:	ELECTRONIC SUBMITTA	I RECEIVED	unionox/997.56.855.67/517.7555775547.867			

FEE PAID:__



For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance





VOLUME REQUIRED = 32,177 CF VOLUME PROVIDED = 38,232 CF TOP OF POND = 5168.00

MAX WATER SURFACE ELEVATION = 5167.75

<u>POND 2:</u>

VOLUME REQUIRED = 15,970 CF VOLUME PROVIDED = 10,125 CF TOP OF POND = 5164.55MAX WATER SURFACE ELEVATION = 5164.55*

* POND OVERFLOWS TO POND 3

<u>POND 3:</u>

VOLUME REQUIRED = 19,143 CF VOLUME PROVIDED = 40,365 CF TOP OF POND = 5163.25

MAX WATER SURFACE ELEVATION = 5160.25

(SQ. FT) (AC.) (CFS) (CF) (cfs/ac.) (inches) 8519 8519 100.0% 0.0% 0.0% 0.0% 6.88 0.44 **EXISTING BASIN A** 232346 | 5.33 1.29 347850 7.99 10.30 0.44 12755 12755 **EXISTING BASIN B** 100.0% 0.0% 0.0% 0.0% 1.29

17.18

21274 21274

WESTGATE COMMUNITY CENTER

Proposed Developed Conditions Basin Data Table This table is based on the DPM Section 22.2, Zone: 1

TOTAL

580196 | 13.32

Basin	Area	Area	Land Treatment Percentages			Q(100yr)	Q(100yr)	V(100yr)	V _(100yr-6hr)	V _(100yr-10day)	FIRST FLUSH	
ID	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)	(CF)
CURRENT ONSI	TE BASINS	3										
BASIN A1	117785	2.70	0.0%	0.0%	35.0%	65.0%	3.85	10.40	1.63	15970	25348	2169
BASIN A2	89950	2.06	0.0%	0.0%	20.0%	80.0%	4.07	8.40	1.77	13298	22113	2039
BASIN A3	16007	0.37	0.0%	0.0%	100.0%	0.0%	2.87	1.05	0.99	1321	1321	0
BASIN A4	8604	0.20	0.0%	0.0%	35.0%	65.0%	3.85	0.76	1.63	1167	1852	158
BASIN B1	18833	0.43	0.0%	0.0%	100.0%	0.0%	2.87	1.24	0.99	1554	1554	0
BASIN B2	207317	4.76	0.0%	0.0%	100.0%	0.0%	2.87	13.66	0.99	17104	17104	0
BASIN B3	121700	2.79	0.0%	0.0%	65.0%	35.0%	3.40	9.49	1.33	13519	18737	1207
TOTAL	580196	13.32	-	-	-	-	-	45.00	-	63931	122595	5573

---5025--- Existing index contour EXISTING INTERMEDIATE CONTOUR — PROPOSED INDEX CONTOUR **—————————** PROPOSED INTERMEDIATE PROPOSED MAJOR-BASIN PROPOSED SUB-BASIN



NOT FOR CONSTRUCTION



PROPOSED DRAINAGE NARRATIVE

WESTGATE COMMUNITY CENTER IS LOCATED NORTH OF DEVARGAS ROAD, EAST OF SNOW VISTA CHANNEL AND WEST OF 98TH STREET. THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF THE WESTGATE COMMUNITY CENTER AND REQUEST DRB SITE PLAN FOR BUILDING PERMIT APPROVAL

EXISTING CONDITIONS:

THE SITE IS CURRENTLY UNDEVELOPED AND FREE DISCHARGES TO THE SOUTH INTO DEVARGAS ROAD. THE SITE CURRENTLY DRAINS FROM NORTHWEST TO SOUTHWEST. THE SITE IS BORDERED TO THE WEST BY THE SNOW VISTA CHANNEL. THIS CHANNEL AND THE WESTGATE SITE, ARE NOT LOCATED WITHIN A FEMA DESIGNATED FLOOD ZONE (FEMA FIRM MAP #35001C0336H).

SITE HISTORY:

SEVERAL DRAINAGE REPORTS AND STUDIES HAVE INCLUDED THE SITE WITHIN THEIR ANALYSIS SAD 222 DRAINAGE REPORT PREPARED BY THE LARKIN GROUP DATED 9/12/2000 STATES THAT THE INFRASTRUCTURE WITHIN THE TOWER/SAGE DRAINAGE BASIN WAS INITIALLY SIZED DRAIN WITHIN 98TH STREET WAS SIZED TO CARRY RUNOFF GENERATED WITHIN THE 98TH STREET RIGHT OF WAY. THE PROPERTY OWNERS ALONG THE WEST EDGE OF 98TH STREET BETWEEN TOWER ROAD AND DEVARGAS ROAD ARE NOT INCLUDED WITHIN THE ANALYSIS OF SAD 222 AS THEY WILL MANAGE THEIR OWN RUNOFF ONSITE. THE AMOLE HUBBELL DRAINAGE MANAGEMENT PLAN FINAL FACILITIES REPORT DATED 7/22/1999 NOTES SIMILAR DRAINAGE ISSUES WITHIN THE TOWER/SAGE DRAINAGE BASIN. PER THE REPORT, THE CITY OF ALBUQUERQUE HAS RESTRICTED NEW DEVELOPMENT TO A RUNOFF RATE OF 1.29 CFS/ACRE. HUBBELL DRAINAGE REPORT PREPARED BY WILSON & CO DATED 3/26/14 REANALYZED THE THIS ANALYSIS POINT INCLUDES THE TRAILER PARK TO THE EAST AS PREVIOUSLY STATED THAT THESE PROPERTIES WILL MANAGE THEIR OWN RUNOFF ONSITE THESE ARE CONTRADICTING STATEMENTS. FURTHER ANALYSIS OF THE AS-BUILT OF SAD 222 SHOW THAT THE STORM DRAIN WITHIN 98TH STREET WAS DESIGNED TO HAVE A CAPACITY OF 59.30 CFS. THIS FLOW IS SIGNIFICANTLY LESS THAN THE 181 CFS THAT THE 2014 AMOLE HUBBELL DRAINAGE REPORT DESCRIBES.

THE STORM DRAIN WITHIN 98TH STREET IS UNDER CAPACITY AND CANNOT HANDLE DEVELOPED FLOWRATES FROM THE WESTGATE COMMUNITY CENTER SITE. AFTER MEETING WITH COA HYDROLOGY ON 8/7/2018 AND RESEARCHING THE AFOREMENTIONED REPORTS AND AS-BUILTS, IT WAS DETERMINED THAT THE SITE WILL BE REQUIRED TO RETAIN THE 100 YEAR — 6 HOUR STORM EVENT ONSITE.

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED WITHIN PRECIPITATION ZONE 1. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE SITE CONDITIONS.

PROPOSED CONDITIONS:

PER THE EXISTING DRAINAGE REPORTS AND CAPACITY OF THE STORM DRAIN WITHIN 98TH STREET, THE SITE MUST RETAIN THE 100 YEAR - 6 HOUR STORM EVENT ONSITE.

THE SITE IS DIVIDED INTO 2 LARGE BASINS GENERALLY SEPARATING THE SITE NORTH AND

APPROXIMATELY 29,267 CF. POND 2 AND POND 3 ARE LOCATED ALONG THE SOUTHERN CONTAINED. SUBBASIN A4 IS WITHIN THE PROPOSED PUBLIC SIDEWALK ACCESS EASEMENT. THIS SUBBASIN IS NOT RETAINED ONSITE. BUT DISCHARGES APPROXIMATELY 0.76 CFS INTO

BASIN B IS LOCATED ON THE NORTH PORTION OF THE SITE. THIS BASIN IS PRIMARILY TO THE SOUTHEAST INTO POND 1. SUBBASIN B3 DISCHARGES TO THE NORTH AND EAST OF THE EXISTING BUILDING INTO POND A AS WELL. THE 100 YR - 6 HR VOLUME FOR BASIN B I APPROXIMATELY 32,176 CF. UNDER A LARGE STORM EVENT, A CONCRETE RIBBON CHANNEL WILL MITIGATE ANY OVERFLOW FROM POND 1 TO THE EAST OF THE PROPOSED BUILDING.

FIRST FLUSH VOLUME IS RETAINED WITHIN THE 100 YR - 6 HR STORM EVENT.

SEE POND TABLE THIS SHEET FOR MORE INFORMATION

CONCLUSION:

THE SITE RETAINS THE 100 YEAR-6 HOUR STORM EVENT. THEREFORE, WE ARE IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.



WESTGATE COMMUNITY CENTER

10001 De Vargas Road SW, Albuquerque, New Mexico 87121 Project #:

PROJECT ARCHITECT: LEE GAMELSKY, AIA

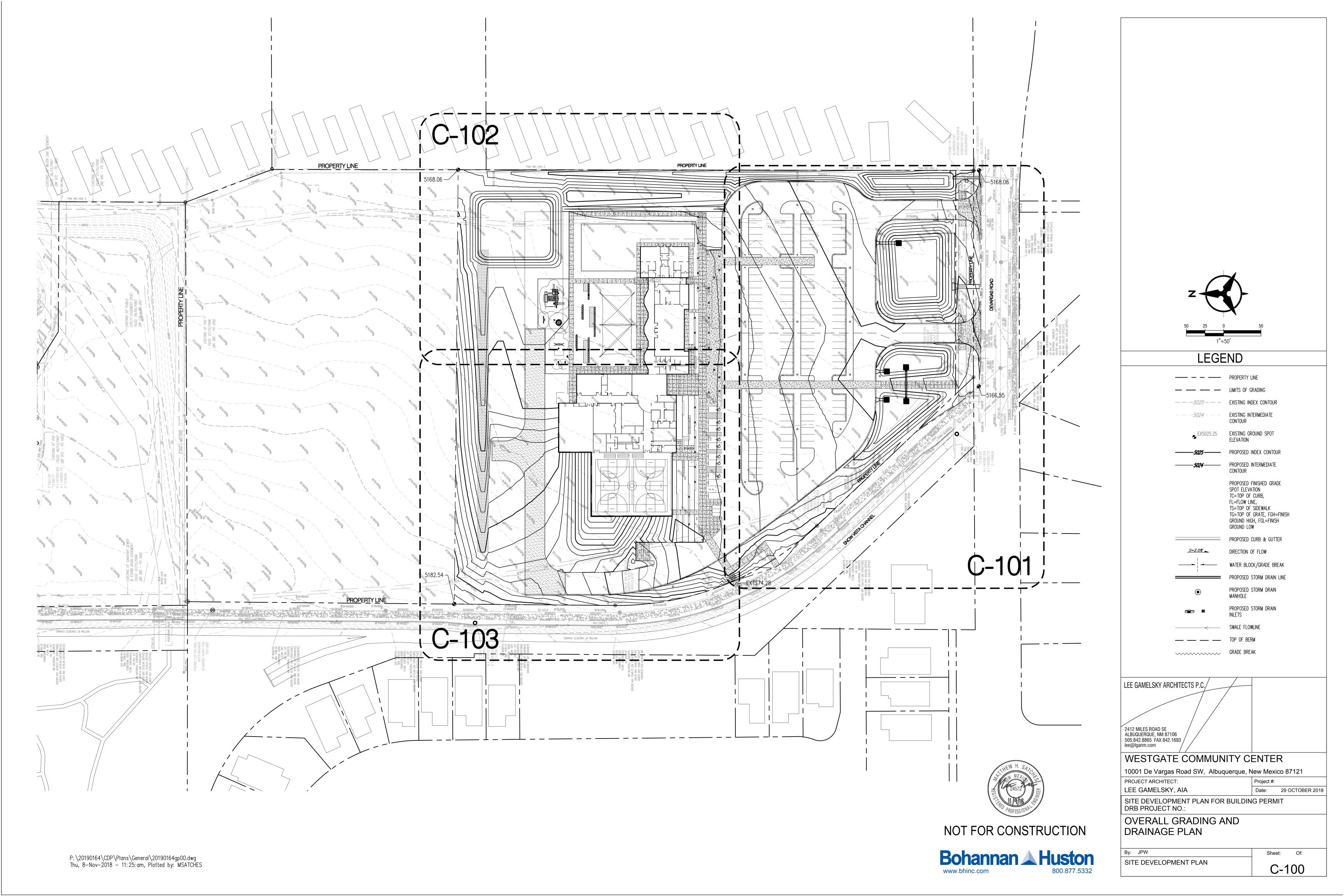
Date: 29 OCTOBER 2018 SITE DEVELOPMENT PLAN FOR BUILDING PERMIT

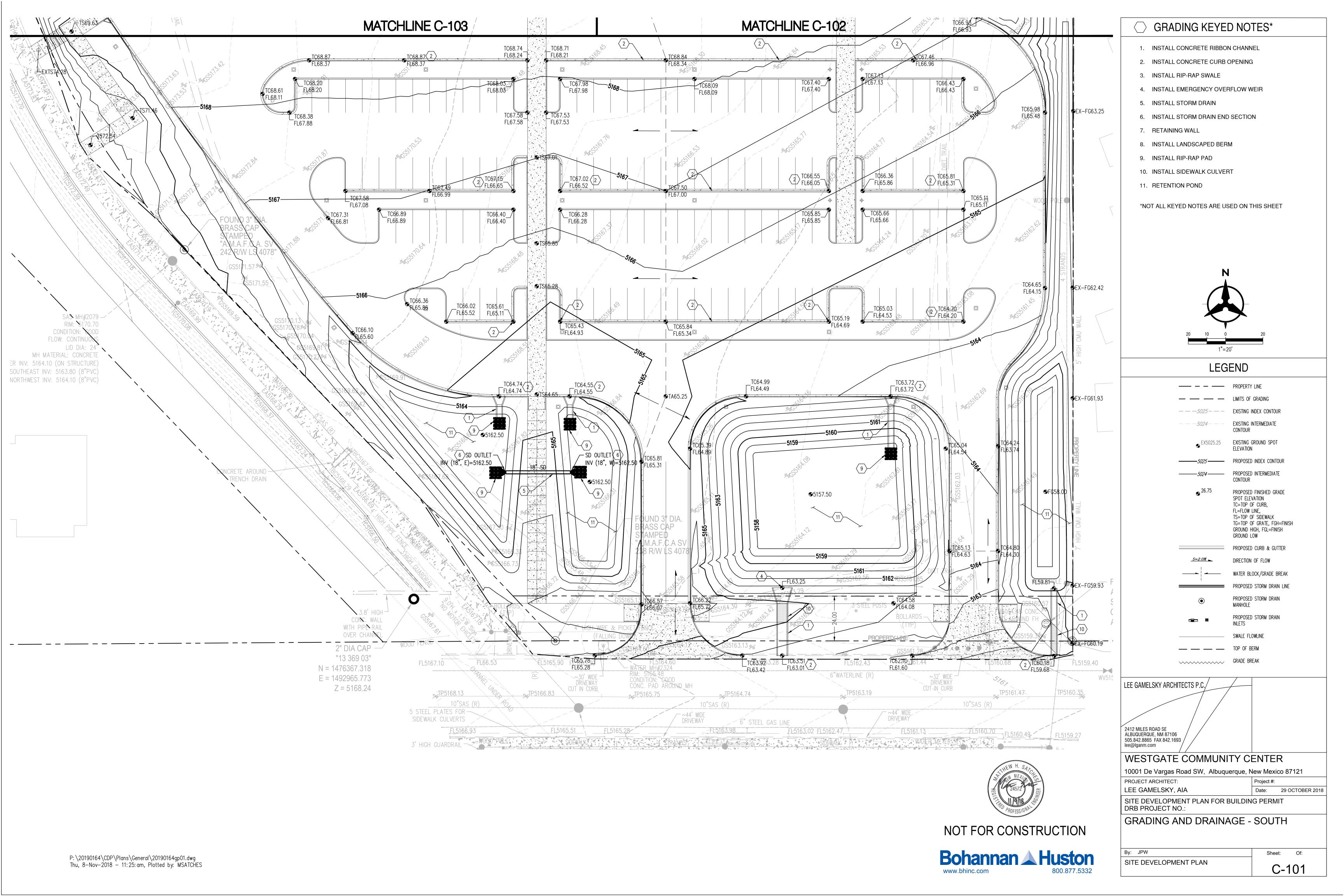
DRB PROJECT NO .: DRAINAGE MANAGEMENT PLAN

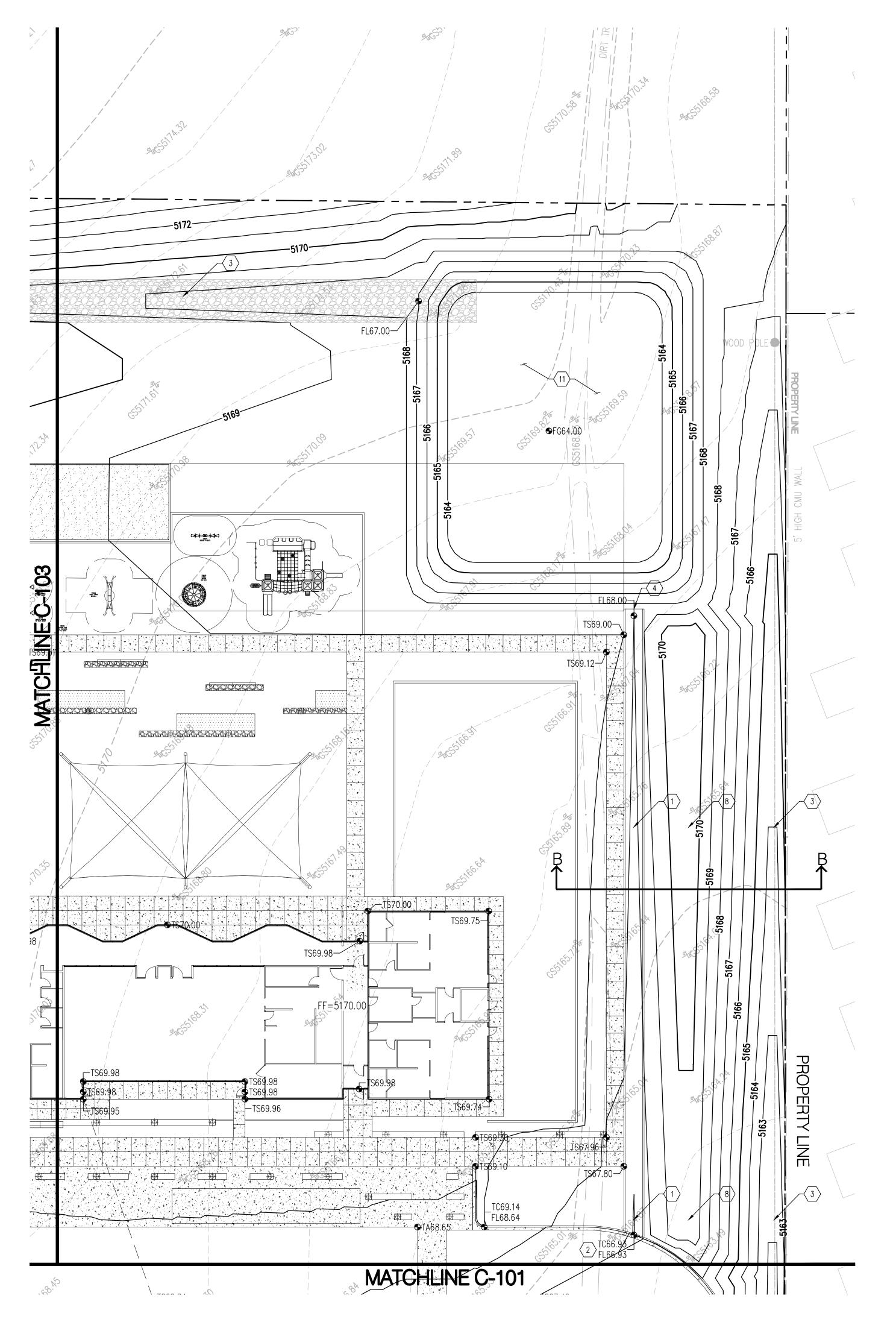
By: JPW SITE DEVELOPMENT PLAN

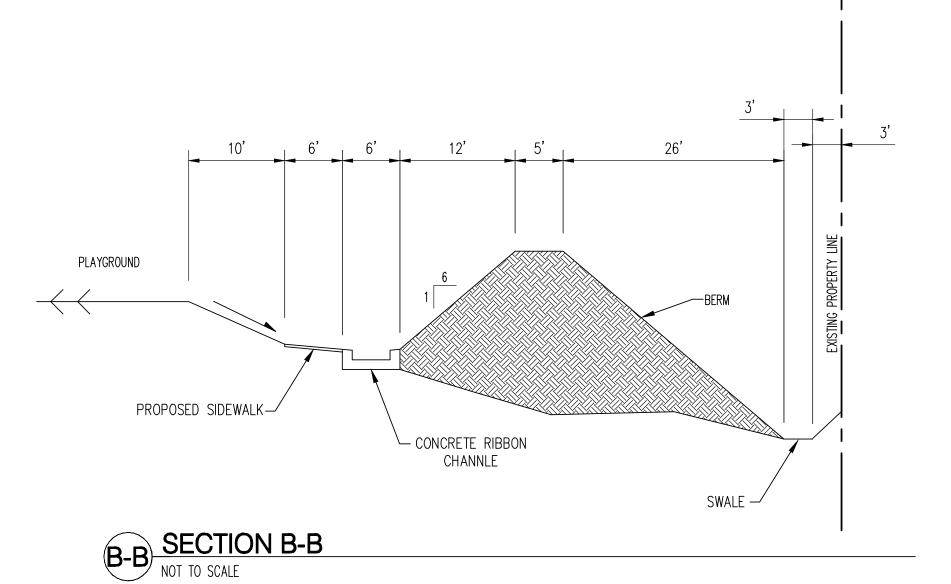
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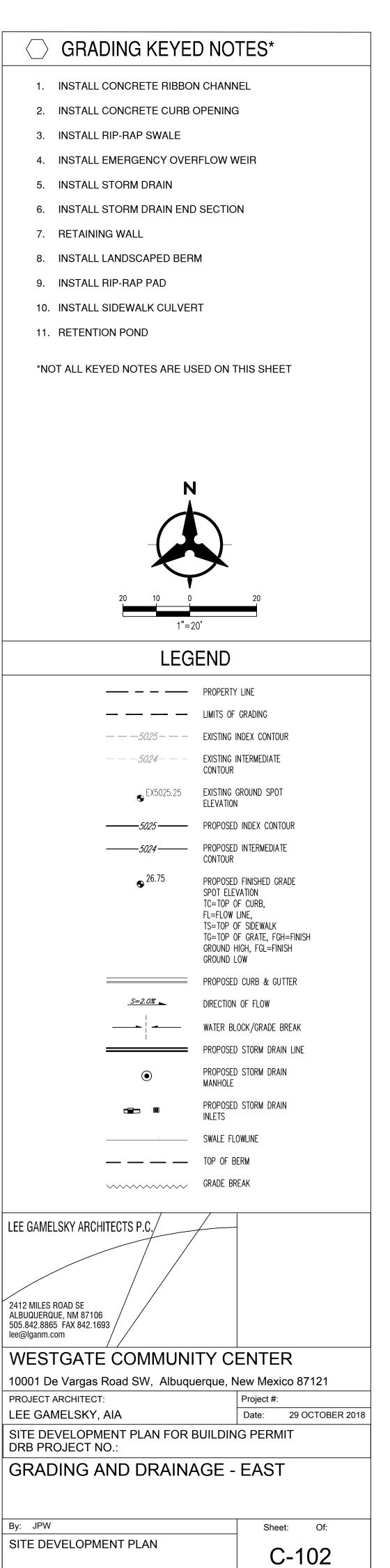


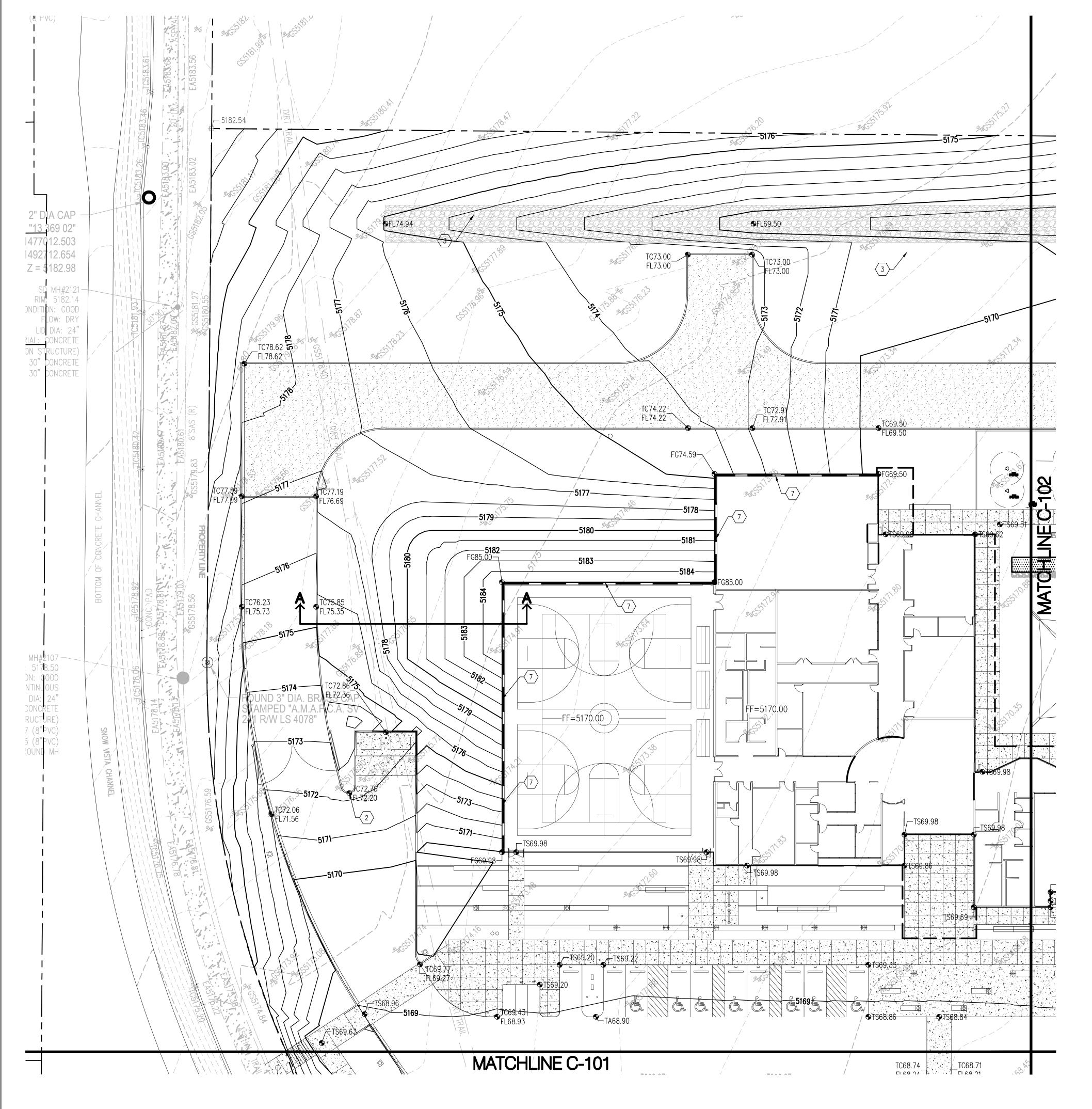


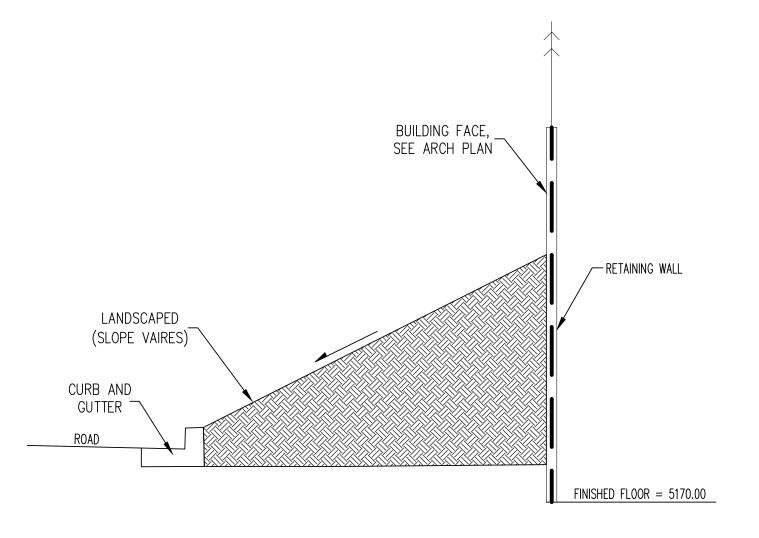


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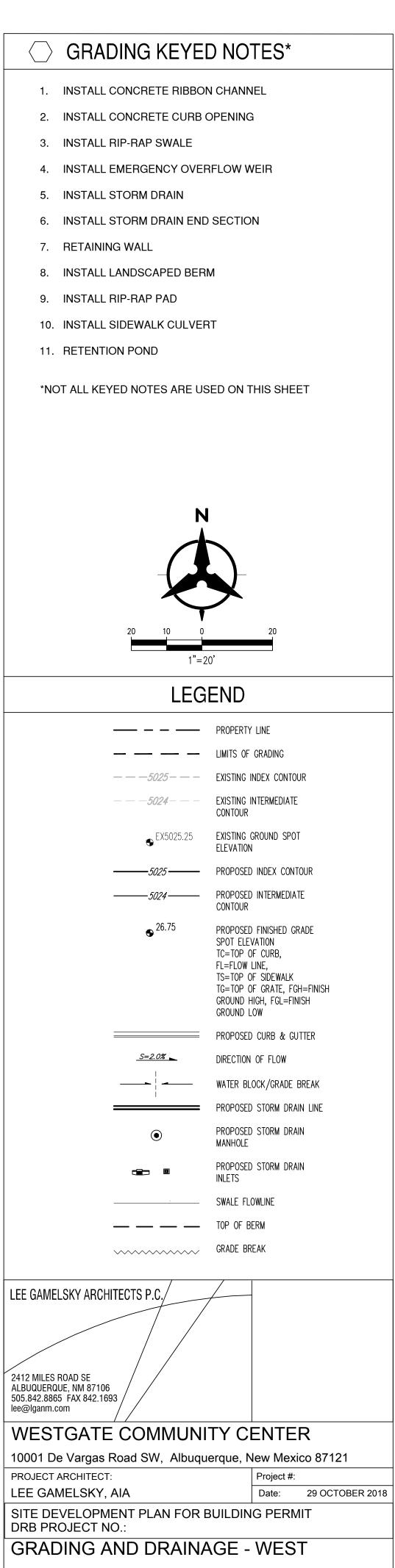












By: JPW Sheet: Of:

SITE DEVELOPMENT PLAN

C-103