Bohannan Huston

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

To: City of Albuquerque Hydrology
Planning Department
600 2nd St. NW
Albuquerque, NM 87102

Requested by: Matt Satches

Date: 11-30-2018

Time Due:
- ☒ **This A.M.**
- ☐ **This P.M.**
- ☐ **Rush** _____
- ☐ **By Tomorrow**

Phone: 505-924-3695
Job No.: 20191064

Job Name: Westgate Community Center

DELIVERY VIA

☒ **Courier** ☐ **Federal Express**
☐ **Mail** ☐ **UPS**
☐ **Other**

PICK UP

Item: _____

ITEM NO.	QUANTITY	DESCRIPTION
1	1	C-001 Drainage Management Plan
2	1	C-100 Overall Grading and Drainage Plan
3	1	C-101 Grading and Drainage Plan: South
4	1	C-102 Grading and Drainage Plan: East
5	1	C-103 Grading and Drainage Plan: West
6	1	Drainage and Transportation Information Sheet
7	1	Printed Copy of Emailed Submittal
8	1	Re-Submittal Letter

COMMENTS / INSTRUCTIONS

Please find attached our Hydrology Re-Submittal 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 11/2018)

Project Title: Westgate Community Center Building Permit #: _____ Hydrology File #: M09D030

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

Legal Description: TR OF LAND WITHIN NW/4 NW/4 NW/4 EXC A S'WLY POR SEC 33 T10NR2E (AKA PARCEL 1 SURVEY OF TOWN OF ATRISCO GRANT) CONT 12.8369 AC M/L

City Address: 10001 De Vargas Road SW 87121

Applicant: Bohannan Huston, Inc. Contact: Matt Satches

Address: 7500 Jefferson St. NE, Albuquerque, NM 87109

Phone#: 505-823-1000 Fax#: _____ E-mail: msatches@bhinc.com

Owner: City of Albuquerque Contact: Steve James

Address: _____

Phone#: _____ Fax#: _____ E-mail: stephenjames@cabq.gov

TYPE OF SUBMITTAL: _____ PLAT (___# OF LOTS) ____ RESIDENCE __X__ DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: __X__ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION __X__ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
__X__ GRADING PLAN
____ DRAINAGE MASTER PLAN
__X__ 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
__X__ 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: 11-30-2018 By: Lee Gamelsky

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Bohannan Huston

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November 28, 2018

Mr. Dana Peterson, PE
Senior Engineer
Planning Department
600 2nd St NW
Albuquerque, NM 87102

Re: Westgate Community Center: M09D030
COA Hydrology Site Plan for Building Permit Approval Re-Submittal

Dear Mr. Peterson:

Enclosed for your review is a copy of the Westgate Community Center Drainage Management Plan and Grading Plan. Below is a brief description of how the comments from your response letter (dated 11/21/2018) were addressed:

1. Future public improvements (i.e. new curb & gutter, etc.) are now shown along DeVargas Rd with approximate future spot elevations. The grading has been modified to ensure that at the time these improvements are constructed, the ponds function as originally intended. The Drainage Management Plan shows how Pond 3 varies during proposed and future conditions. Under both conditions, the pond has enough capacity.
2. There is now 1 FT of freeboard within Pond 1. See the Drainage Management Plan for Top of Pond Elevation, Overflow Weir Invert, and Maximum Water Surface Elevation.

   The Overflow Weir is now sized for the 100 YR Storm Event. The concrete ribbon channel located to the east of the building is also sized for the 100 YR Storm Event. See the Drainage Management Plan for calculations.
3. The sidewalk culvert/channel located within Pond 3 has been removed.
4. The volume for the pond in Basin A-3 (Pond 4) is now provided.

   The sidewalk culvert located within Pond 4 has now been removed as well. During large storm events, Pond 4 will overflow into the concrete ribbon channel and then discharge through a curb opening constructed with the asphalt trail at the southeast corner of the site.

With this submittal, we are requesting City of Albuquerque Hydrology Site Plan for Building Permit Approval. If you have any questions or require further information, please feel free to contact me.

Sincerely,

Matt Satches, PE
Engineer
Community Development & Planning

MHS/Enclosures

Matthew Satches

From: Matthew Satches
Sent: Wednesday, November 28, 2018 7:05 PM
To: 'PLNDRS@cabq.gov'
Cc: Michael Balaskovits
Subject: Westgate CC Hydro Submittal: Hydro Number M09D030

All,

Use the link below to download the COA Hydrology Submittal for the above referenced project. We are requesting Hydrology Site Plan for Building Permit Approval.

https://sfspublic.bhinc.com/EmailAccess.aspx?tk=TKmsatchesD2811201819413

Thanks,

Matt Satches, PE

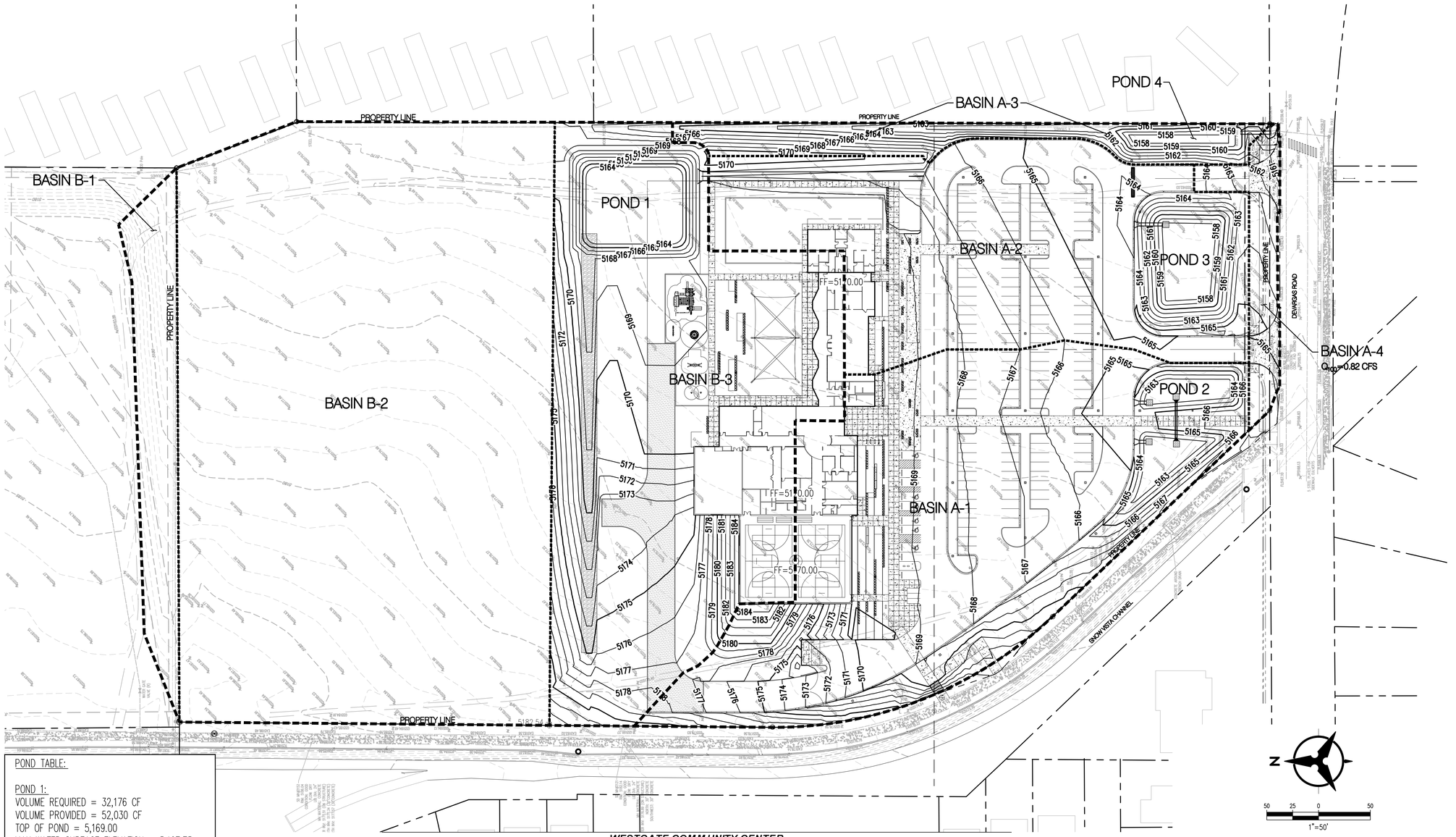
Engineer Community Development & Planning

Bohannan Huston

p. 505.823.1000 | **d.** 505.923.3315

Connect: bhinc.com | Facebook | LinkedIn | Twitter

Ranked #9 on 2018 ENR Southwest Design Firms List | ENR Top 500 Design Firm since 1998



POND TABLE:

POND 1:
VOLUME REQUIRED = 32,176 CF
VOLUME PROVIDED = 52,030 CF
TOP OF POND = 5,169.00
MAX WATER SURFACE ELEVATION = 5,167.75
EMERGENCY OVERFLOW ELEVATION = 5,168.00

POND 2:
VOLUME REQUIRED = 16,246 CF
VOLUME PROVIDED = 9,585 CF
TOP OF POND = 5,164.55
MAX WATER SURFACE ELEVATION = 5,164.55*
* POND OVERFLOWS TO POND 3

POND 3: (PROPOSED)
VOLUME REQUIRED = 19,562 CF
VOLUME PROVIDED = 33,669 CF
TOP OF POND = 5,163.00
MAX WATER SURFACE ELEVATION = 5,161.25

POND 3: (FUTURE)
VOLUME REQUIRED = 19,562 CF
VOLUME PROVIDED = 24,651 CF
TOP OF POND = 5,162.00
MAX WATER SURFACE ELEVATION = 5,161.25

POND 4:
VOLUME REQUIRED (100YR-10DAY) = 1,321 CF
VOLUME PROVIDED = 3,185 CF
TOP OF POND = 5,160.00
MAX WATER SURFACE ELEVATION = 5,159.20

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Wed, 28-Nov-2018 - 6:59:pm, Plotted by: MSATCHES

WESTGATE COMMUNITY CENTER

Existing Developed Conditions Basin Data Table

This table is based on the DPM Section 22.2, Zone: 1

Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages A	B	C	D	Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V(100yr) (inches)	$V_{(100yr-6hr)}$ (CF)	$V_{(100yr-24hr)}$ (CF)
EXISTING BASIN A	232346	5.33	100.0%	0.0%	0.0%	0.0%	1.29	*6.88*	*0.44*	*8519*	*8519*
EXISTING BASIN B	347850	7.99	100.0%	0.0%	0.0%	0.0%	1.29	*10.30*	*0.44*	*12755*	*12755*
TOTAL	**580196**	**13.32**	-	-	-	-	-	***17.18***	-	***21274***	***21274***

Proposed Developed Conditions Basin Data Table

This table is based on the DPM Section 22.2, Zone: 1

Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages A	B	C	D	Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V(100yr) (inches)	$V_{(100yr-6hr)}$ (CF)	$V_{(100yr-10day)}$ (CF)	FIRST FLUSH (CF)
CURRENT ONSITE BASINS												
BASIN A1	119824	2.75	0.0%	0.0%	35.0%	65.0%	3.85	*10.58*	*1.63*	*16246*	*25787*	*2207*
BASIN A2	87265	2.00	0.0%	0.0%	20.0%	80.0%	4.07	*8.15*	*1.77*	*12901*	*21453*	*1978*
BASIN A3	16007	0.37	0.0%	0.0%	100.0%	0.0%	2.87	*1.05*	*0.99*	*1321*	*1321*	*0*
BASIN A4	9262	0.21	0.0%	0.0%	35.0%	65.0%	3.85	*0.82*	*1.63*	*1256*	*1993*	*171*
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	**580208**	**13.32**	-	-	-	-	-	**44.99**	-	**63899**	**122470**	**5562**

Concrete Rundown

Rundown #	Basin ID	Rundown Type	Actual Flow (Q100)	Min Weir** Length ft	Weir Opening Width ft	Weir Opening Height ft	Channel Height ft	Channel Width ft	Minimum Slope	Capacity* CFS
R1	B	Rectang	24.4	10.00	14.00	1.00	0.67	8.00	0.50%	29.92
Weir Eq: Q=2.65L(h^1.5) - **									Capacity Based on Manning's Eq w/ N=0.013 - *	

PROPOSED DRAINAGE NARRATIVE

INTRODUCTION:

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 PRIOR TO THE ADOPTION OF AHYMO. SINCE THE ADOPTION OF AHYMO, IT WAS FOUND THAT THE RUNOFF CONTRIBUTING TO INFRASTRUCTURE WITHIN THE TOWER/SAGE DRAINAGE BASIN, INCLUDING THE 98TH STREET STORM DRAIN, WAS MORE THAN INITIALLY THOUGHT. THE STORM 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. THIS WAS PROPOSED TO ALLEVIATE THE ISSUES DOWNSTREAM OF THE SITE. A NEW AMOLE HUBBELL DRAINAGE REPORT PREPARED BY WILSON & CO DATED 3/26/14 REANALYZED THE AGING 1999 REPORT. THIS NEWER REPORT DESCRIBES THE SITE'S RUNOFF AS DISCHARGING AT THE NORTHWEST CORNER OF 98TH STREET AND DEVARGAS ROAD AS ANALYSIS POINT SV16 AT A RATE OF 181 CFS. THIS ANALYSIS POINT INCLUDES THE TRAILER PARK TO THE EAST AS WELL AS PROPERTY ALONG THE WESTERN SIDE OF 98TH STREET. THE SAD 222 REPORT 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 SOUTH.

BASIN A IS LOCATED ON THE SOUTH PORTION OF THE SITE. THIS BASIN DRAINS FROM NORTH TO SOUTH AND CONTAINS A PORTION OF THE PROPOSED BUILDING AS WELL AS THE PARKING LOT SOUTH OF THE BUILDING. THE 100YR - 6HR VOLUME FOR SUB-BASINS A1 AND A2 IS APPROXIMATELY 29,147 CF. POND 2 AND POND 3 ARE LOCATED ALONG THE SOUTHERN PROPERTY LINE. THESE PONDS ARE SIZED TO RETAIN THE VOLUME FROM SUBBASIN A1 AND A2. POND 2 IS UNDERSIZED FOR THE SUBBASIN, OVERFLOW FROM THIS POND CONTINUES INTO POND 3. SUBBASIN A3 IS A SMALL BASIN ON THE EAST SIDE OF THE SITE THAT IS SELF CONTAINED WITHIN POND 4. POND 4 IS SIZED FOR THE 100 YR - 10 DAY STORM EVENT. SUBBASIN A4 IS WITHIN THE PROPOSED PUBLIC SIDEWALK ACCESS EASEMENT. THIS SUBBASIN IS NOT RETAINED ONSITE, BUT DISCHARGES APPROXIMATELY 0.82 CFS INTO DEVARGAS ROAD.

BASIN B IS LOCATED ON THE NORTH PORTION OF THE SITE. THIS BASIN IS PRIMARILY UNDEVELOPED AND WILL CONTINUE TO BE UNDEVELOPED. SUBBASINS B1 AND B2 DISCHARGE 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 IS 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. SEE CAPACITY CALCULATIONS THIS SHEET FOR MORE INFORMATION.

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.

LEGEND

- PROPERTY LINE
- LIMITS OF GRADING
- 5025 EXISTING INDEX CONTOUR
- 5024 EXISTING INTERMEDIATE CONTOUR
- 5025 PROPOSED INDEX CONTOUR
- 5024 PROPOSED INTERMEDIATE CONTOUR
- PROPOSED MAJOR-BASIN
- PROPOSED SUB-BASIN

MATTHEW H. SATCHER — NEW MEXICO — 24577 — REGISTERED PROFESSIONAL ENGINEER — 11/30/18

NOT FOR CONSTRUCTION

Bohannan Huston
www.bhinc.com 800.877.5332

LEE GAMELSKY ARCHITECTS P.C.
2412 MILES ROAD SE
ALBUQUERQUE, NM 87106
505.842.8865 FAX 842.1693
lee@lgarnm.com

WESTGATE COMMUNITY CENTER

10001 De Vargas Road SW, Albuquerque, New Mexico 87121

PROJECT ARCHITECT: LEE GAMELSKY, AIA
Project #:
Date: 30 NOVEMBER 2018

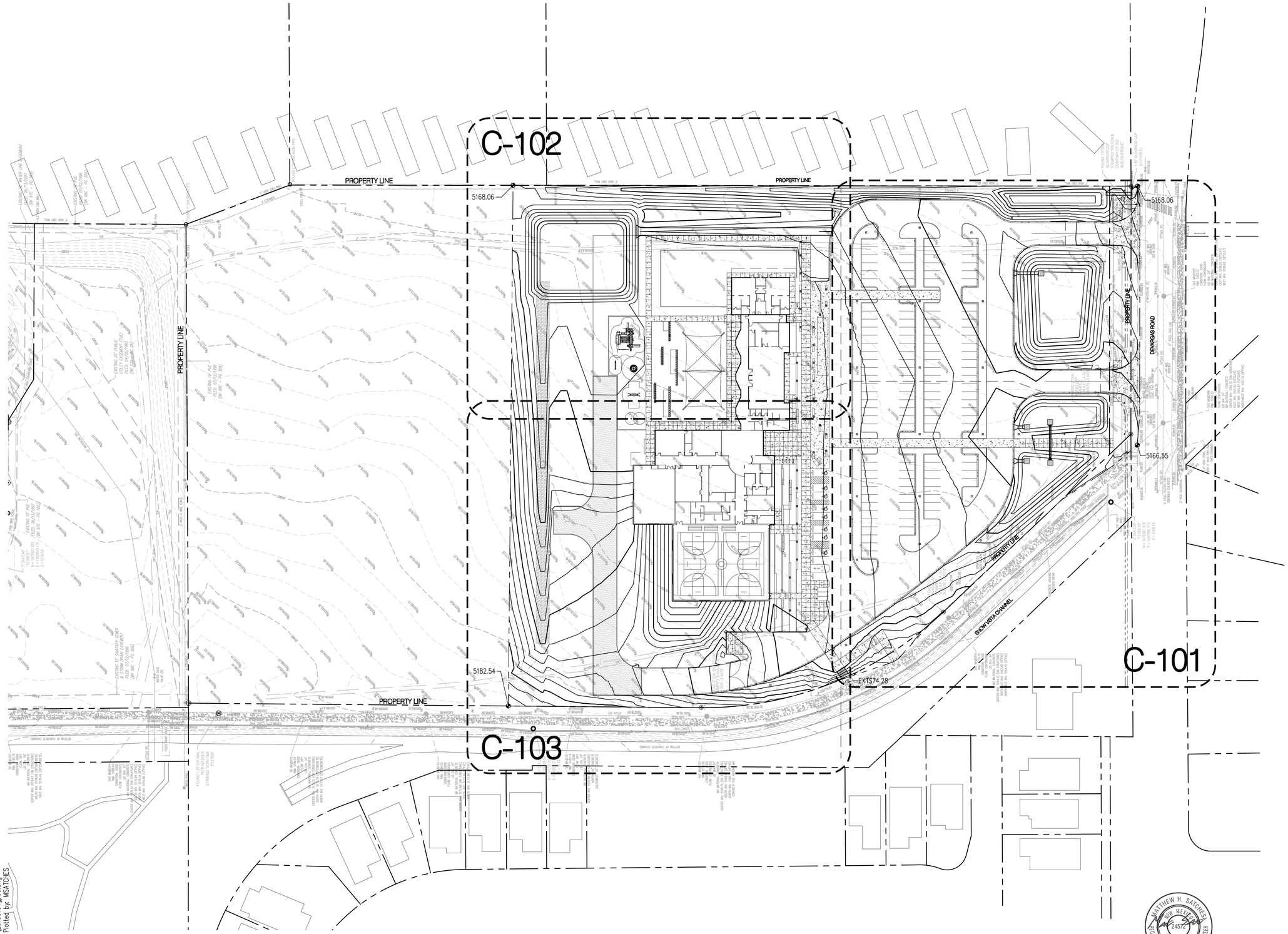
SITE DEVELOPMENT PLAN FOR BUILDING PERMIT
DRB PROJECT NO.:

DRAINAGE MANAGEMENT PLAN

By: JPW

SITE DEVELOPMENT PLAN

Sheet: C-001
Of:



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50 25 0 50

1"=50'

LEGEND

- PROPERTY LINE
- LIMITS OF GRADING
- 5025 — EXISTING INDEX CONTOUR
- 5024 — EXISTING INTERMEDIATE CONTOUR
- EX5025.25 — EXISTING GROUND SPOT ELEVATION
- 5025 — PROPOSED INDEX CONTOUR
- 5024 — PROPOSED INTERMEDIATE CONTOUR
- PROPOSED FINISHED GRADE SPOT ELEVATION TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW
- PROPOSED CURB & GUTTER
- S=2.0% — DIRECTION OF FLOW
- WATER BLOCK/GRADE BREAK
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS
- SWALE FLOWLINE
- TOP OF BERM
- GRADE BREAK

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WESTGATE COMMUNITY CENTER

10001 De Vargas Road SW, Albuquerque, New Mexico 87121

PROJECT ARCHITECT: LEE GAMELSKY, AIA

Project #:

Date: 30 NOVEMBER 2018

SITE DEVELOPMENT PLAN FOR BUILDING PERMIT
DRB PROJECT NO.:

OVERALL GRADING AND DRAINAGE PLAN

By: JPW

SITE DEVELOPMENT PLAN

Sheet: C-100

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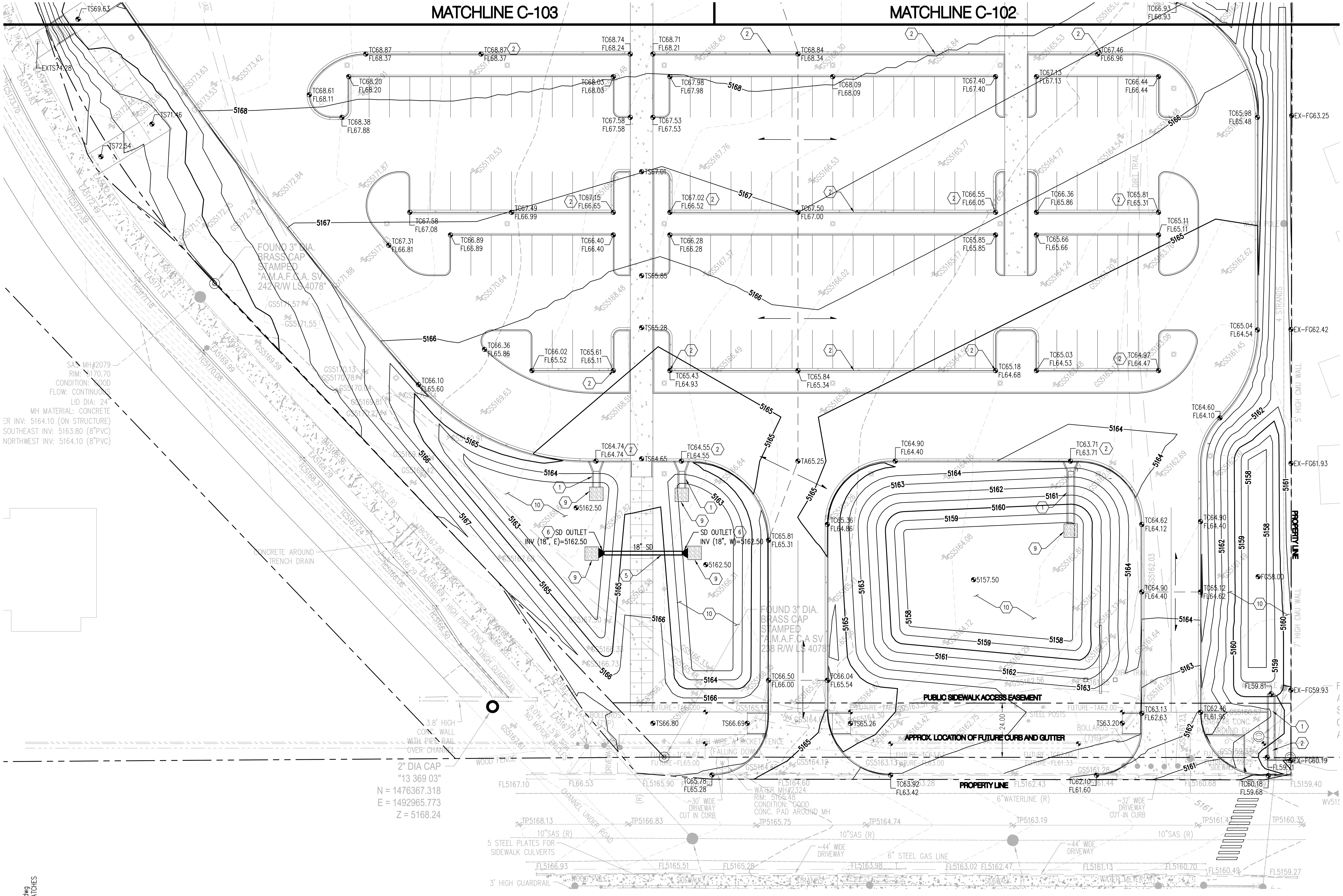
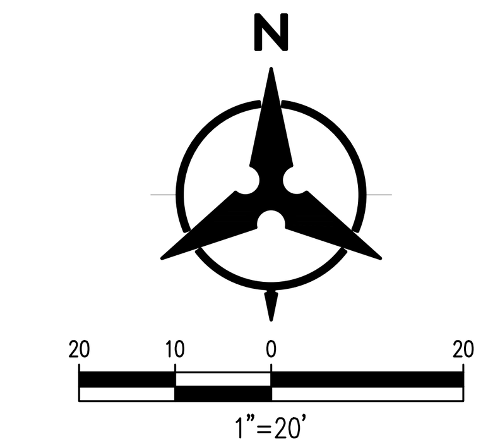
Wed, 28-Nov-2018 - 6:59:pm, Plotted by: MSANCHES



GRADING KEYED NOTES*

1. INSTALL CONCRETE RIBBON CHANNEL
2. INSTALL CONCRETE CURB OPENING
3. INSTALL RIP-RAP SWALE
4. INSTALL EMERGENCY OVERFLOW WEIR
5. INSTALL STORM DRAIN
6. INSTALL STORM DRAIN END SECTION
7. RETAINING WALL
8. INSTALL LANDSCAPED BERM
9. INSTALL RIP-RAP PAD
10. RETENTION POND

*NOT ALL KEYED NOTES ARE USED ON THIS SHEET



LEGEND

- PROPERTY LINE
- LIMITS OF GRADING
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
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- WATER BLOCK/GRADE BREAK
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS
- SWALE FLOWLINE
- TOP OF BERM
- GRADE BREAK
- FUTURE SPOT ELEVATION

NOT FOR CONSTRUCTION

MATTHEW H. SATCHES
NEW MEXICO
24572
REGISTERED PROFESSIONAL ENGINEER
11/30/18

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WESTGATE COMMUNITY CENTER

10001 De Vargas Road SW, Albuquerque, New Mexico 87121

PROJECT ARCHITECT: LEE GAMELSKY, AIA
Project #:
Date: 30 NOVEMBER 2018

SITE DEVELOPMENT PLAN FOR BUILDING PERMIT
DRB PROJECT NO.:

GRADING AND DRAINAGE - SOUTH

By: JPW
SITE DEVELOPMENT PLAN
Sheet: C-101 Of:

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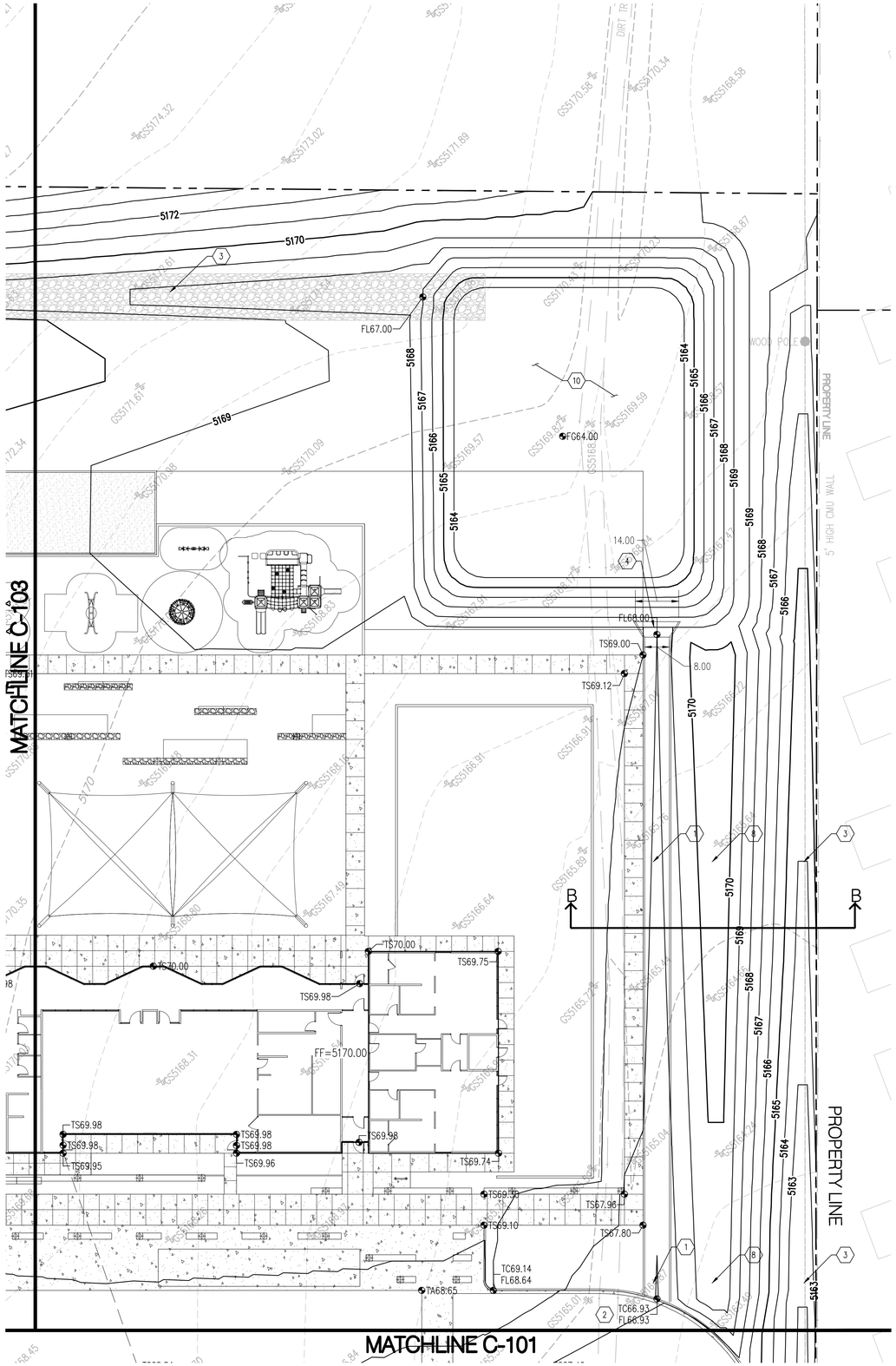
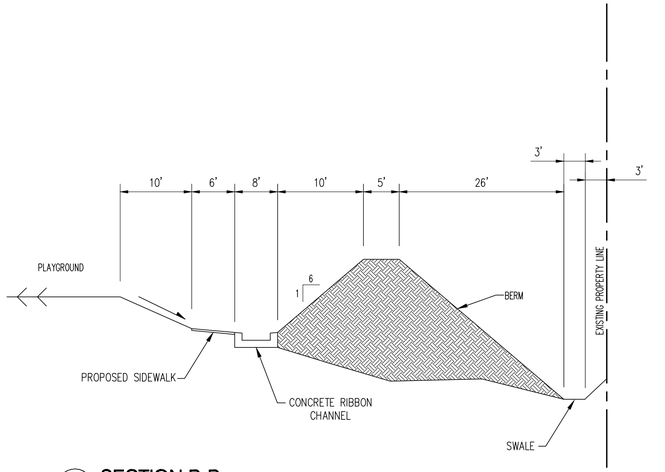
Wed, 28-Nov-2018 - 7:00pm, Plotted by: MSATCHES



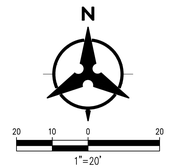


B-B SECTION B-B
NOT TO SCALE

GRADING KEYED NOTES*

1. INSTALL CONCRETE RIBBON CHANNEL
2. INSTALL CONCRETE CURB OPENING
3. INSTALL RIP-RAP SWALE
4. INSTALL EMERGENCY OVERFLOW WEIR
5. INSTALL STORM DRAIN
6. INSTALL STORM DRAIN END SECTION
7. RETAINING WALL
8. INSTALL LANDSCAPED BERM
9. INSTALL RIP-RAP PAD
10. RETENTION POND

*NOT ALL KEYED NOTES ARE USED ON THIS SHEET



LEGEND

- PROPERTY LINE
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- WATER BLOCK/GRADE BREAK
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS
- SWALE FLOWLINE
- TOP OF BERM
- GRADE BREAK
- XX.XX FUTURE SPOT ELEVATION

LEE GAMELSKY ARCHITECTS P.C.
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MATTHEW H. SATCHER NEW MEXICO 24572 11/30/18 REGISTERED PROFESSIONAL ENGINEER

NOT FOR CONSTRUCTION

Bohannan Huston
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WESTGATE COMMUNITY CENTER
10001 De Vargas Road SW, Albuquerque, New Mexico 87121

PROJECT ARCHITECT:	Project #:
LEE GAMELSKY, AIA	Date: 30 NOVEMBER 2018

SITE DEVELOPMENT PLAN FOR BUILDING PERMIT
DRB PROJECT NO.:

GRADING AND DRAINAGE - EAST

By: JPW	Sheet:	Of:
SITE DEVELOPMENT PLAN	C-102	

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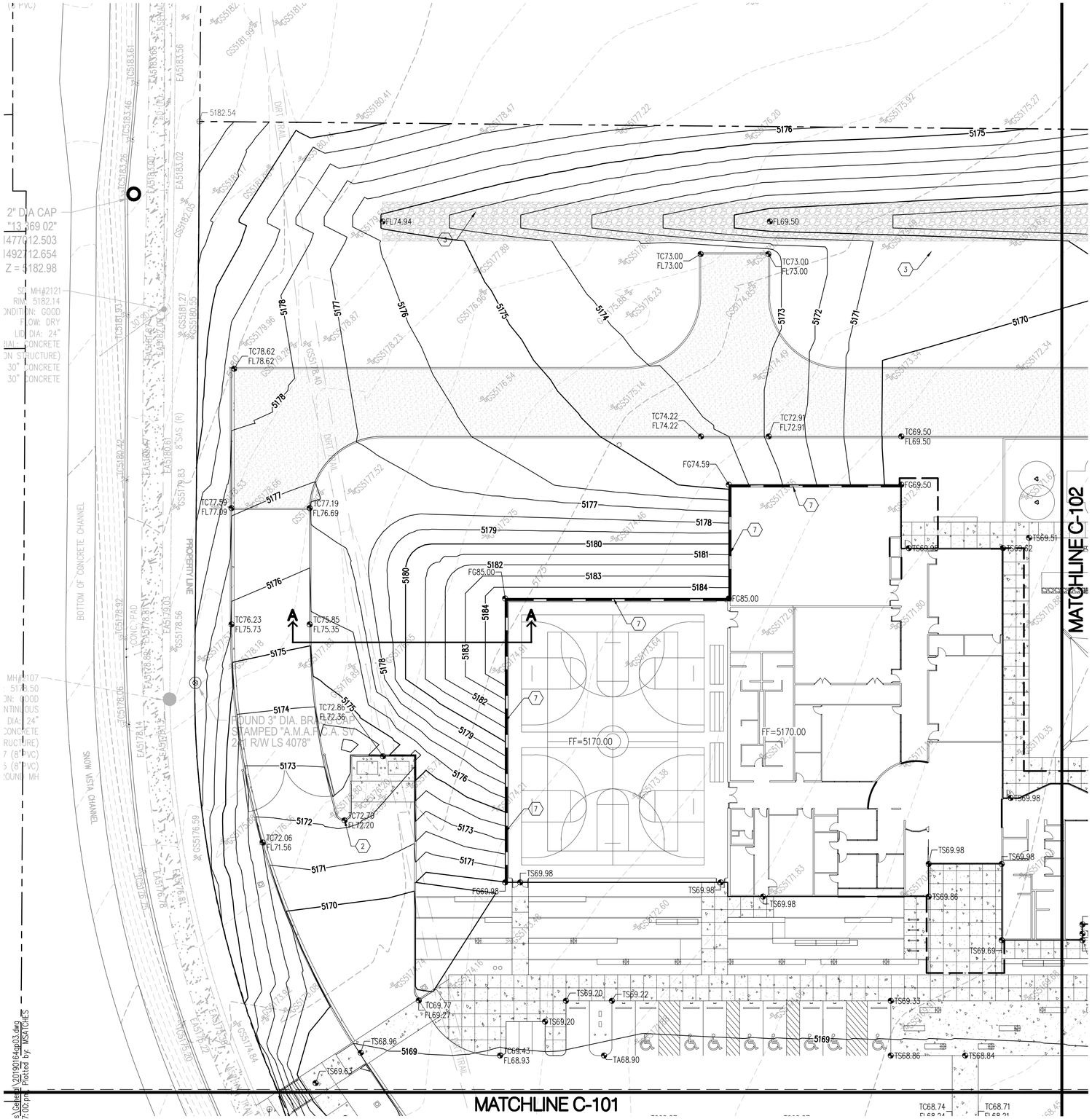
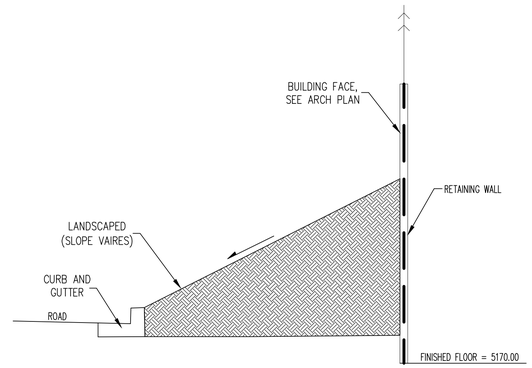
Wed, 28-Nov-2018 - 7:00:pm, Plotted by: MSATCHES



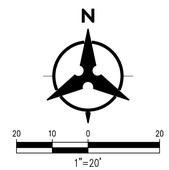


A-A RETAINING WALL DETAIL
NOT TO SCALE

GRADING KEYED NOTES*

1. INSTALL CONCRETE RIBBON CHANNEL
2. INSTALL CONCRETE CURB OPENING
3. INSTALL RIP-RAP SWALE
4. INSTALL EMERGENCY OVERFLOW WEIR
5. INSTALL STORM DRAIN
6. INSTALL STORM DRAIN END SECTION
7. RETAINING WALL
8. INSTALL LANDSCAPED BERM
9. INSTALL RIP-RAP PAD
10. RETENTION POND

*NOT ALL KEYED NOTES ARE USED ON THIS SHEET



LEGEND

- PROPERTY LINE
- LIMITS OF GRADING
- 5025 — EXISTING INDEX CONTOUR
- 5024 — EXISTING INTERMEDIATE CONTOUR
- EX5025.25 — EXISTING GROUND SPOT ELEVATION
- 5025 — PROPOSED INDEX CONTOUR
- 5024 — PROPOSED INTERMEDIATE CONTOUR
- PROPOSED FINISHED GRADE SPOT ELEVATION TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW
- PROPOSED CURB & GUTTER
- S=2.0% — DIRECTION OF FLOW
- WATER BLOCK/GRADE BREAK
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS
- SWALE FLOWLINE
- TOP OF BERM
- GRADE BREAK
- XX.XX — FUTURE SPOT ELEVATION

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SITE DEVELOPMENT PLAN FOR BUILDING PERMIT
DRB PROJECT NO.:

GRADING AND DRAINAGE - WEST

By: JPW

SITE DEVELOPMENT PLAN

Sheet: C-103
Of:

MATTHEW H. SATCHER — NEW MEXICO — 24572 — REGISTERED PROFESSIONAL ENGINEER — 11/30/18

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