

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

April 7, 2022

David Aube, P.E.
Hartman & Majewski Design Group
120 Vassar Dr SE, Suite 100
Albuquerque, NM 87106

**RE: Bareles Commissary Kitchen
1411 South 4th Street SW
Grading and Drainage Plan
Engineer's Stamp Date: 03/01/22
Hydrology File: L14D063**

Dear Mr. Aube:

PO Box 1293

Based upon the information provided in your submittal received 03/08/2022, the Grading & Drainage Plan is approved for Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

PRIOR TO CERTIFICATE OF OCCUPANCY:

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the Drainage Covenant with Exhibit A for the underground stormwater quality facility per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit the original copies along with the \$ 25.00 recording fee check made payable to Bernalillo County to Marion G. Velasquez (mgvelasquez@cabq.gov) on the 4th floor of Plaza de Sol.

www.cabq.gov

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 (Dough Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Commissary Kitchen Building Permit #: _____ Hydrology File #: L-14
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: 001 001LOT 1 BLK 1 GUTIERREZ ADD, BERNALILLO COUNTY, NEW MEXICO
City Address: 1411 South 4th Street SW

Applicant: Homewise Contact: Carl Davis
Address: 1301 Siler Road Building D, Santa Fe, NM 87507
Phone#: 505-469-0572 Fax#: _____ E-mail: cdavis@homewise.org

Other Contact: Design Group Contact: Dave Aube
Address: 120 Vassar Drive SE
Phone#: 505-463-4503 Fax#: 505-242-6881 E-mail: daube@designgroupnm.com

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

IS THIS A RESUBMITTAL? _____ Yes No

DEPARTMENT _____ TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ENGINEER/ARCHITECT CERTIFICATION
- PAD CERTIFICATION
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- 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:

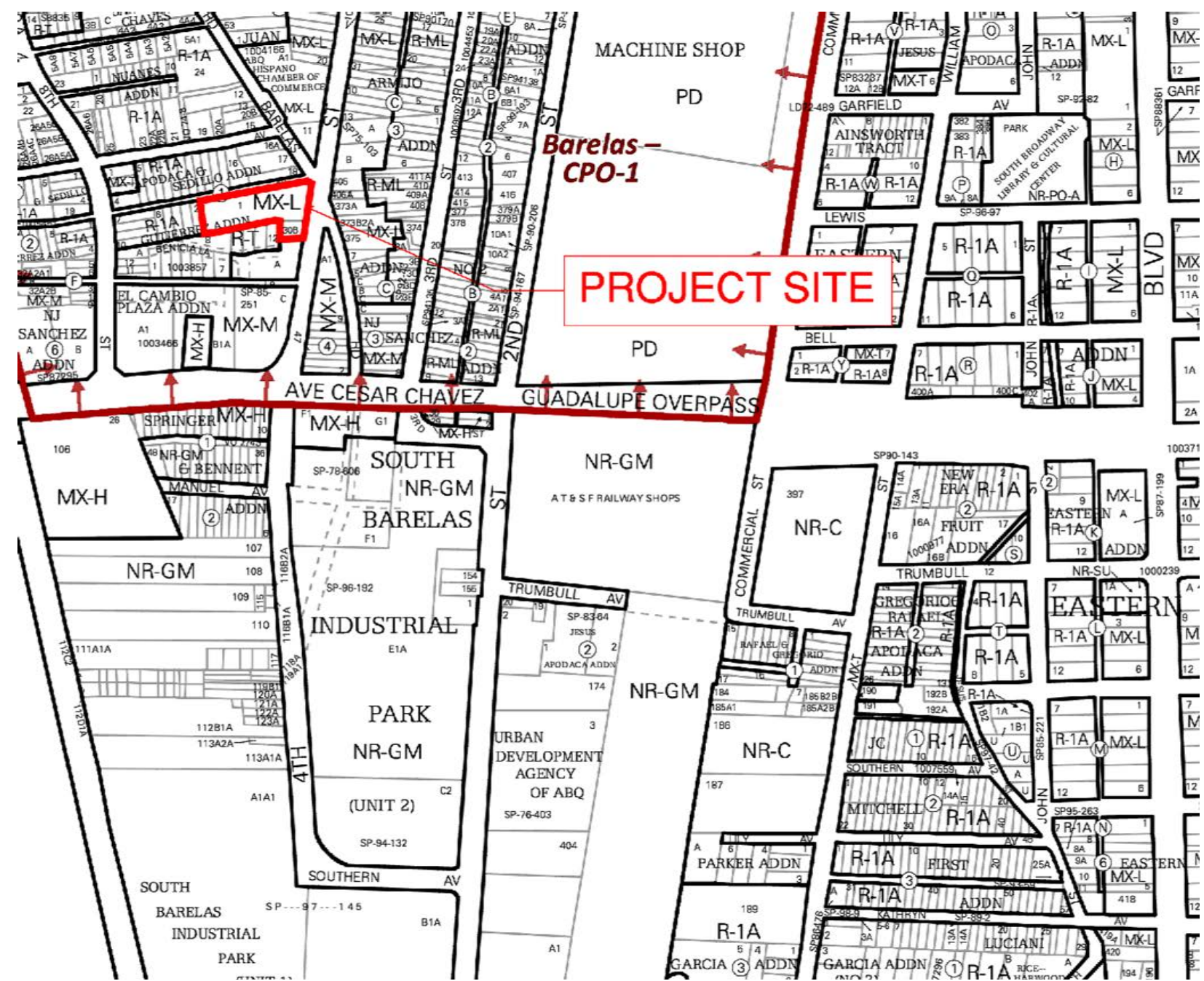
- BUILDING PERMIT APPROVAL
- CERTIFICATE OF OCCUPANCY
- PRELIMINARY PLAT APPROVAL
- SITE PLAN FOR SUB'D APPROVAL
- SITE PLAN FOR BLDG. PERMIT APPROVAL
- FINAL PLAT APPROVAL
- SIA/ RELEASE OF FINANCIAL GUARANTEE
- FOUNDATION PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- SO-19 APPROVAL
- PAVING PERMIT APPROVAL
- GRADING/ PAD CERTIFICATION
- WORK ORDER APPROVAL
- CLOMR/LOMR
- FLOODPLAIN DEVELOPMENT PERMIT
- OTHER (SPECIFY) _____

DATE SUBMITTED: 03-08-2022 By: Dave Aube

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



D1 ZONE ATLAS PAGE L-14-Z
NOT TO SCALE

Drainage Summary					
Project:	HOMEWISE COMMISSARY KITCHEN				
Project Number:	2703				
Date:	02/10/22				
By:	Dave				
Site Location:	2 Per COA DPM Chapter 6				
Precipitation Zone:	2 Per COA DPM Chapter 6				
Existing summary:					
Basin Name:	Ex Basin 1	Ex Basin 2	Ex Basin 3	Ex Basin 4	Ex Basin 5
Area (sf)	2352	948	4456	1144	28512
Area (acres)	0.05	0.02	0.10	0.03	0.65
%A Land treatment	0	0	0	0	0
%B Land treatment	0	0	0	5	5
%C Land treatment	0	0	65	0	50
%D Land treatment	100	100	35	100	45
Soil Treatment (acres)					
Area "A"	0.00	0.00	0.00	0.00	0.00
Area "B"	0.00	0.00	0.00	0.00	0.03
Area "C"	0.00	0.00	0.07	0.00	0.33
Area "D"	0.05	0.02	0.04	0.03	0.29
Excess Runoff (acre-feet)					
100yr. 6hr.	0.0105	0.0042	0.0127	0.0052	0.0875
100yr. 6hr.	0.0068	0.0027	0.0072	0.0033	0.0510
2yr. 6hr.	0.0045	0.0018	0.0038	0.0022	0.0287
100yr. 24hr.	0.0118	0.0048	0.0136	0.0058	0.0948
Peak Discharge (cfs)					
100 yr.	0.23	0.09	0.36	0.12	2.35
10yr.	0.15	0.06	0.20	0.07	1.35
2yr.	0.09	0.04	0.10	0.04	0.69



D5 FLOOD INSURANCE RATE MAP
NOT TO SCALE

FLOOD ZONE DETERMINATION

The surveyed area, as shown hereon, appears to lie within "ZONE X" (areas determined to be outside the 0.2% annual chance floodplain), shown on National Flood Insurance Program Flood Insurance Rate Map 35001C0334G REVISED 09/26/2008.

REVISIONS		
No.	Description	Date

I. PURPOSE AND SCOPE

THE PURPOSE OF THIS DRAINAGE PLAN IS TO PRESENT THE EXISTING AND PROPOSED DRAINAGE CONDITIONS FOR PROPOSED COMMISSARY KITCHEN, LOCATED 1411 4TH STREET SW, IN ALBUQUERQUE. THE ZONE ATLAS PAGE FOR THE SITE IS L-14-Z.

II. SITE DESCRIPTION AND HISTORY

THE PROJECT SITE IS LOCATED ON THE WEST SIDE OF 4TH STREET SW, BETWEEN BELL AVENUE SW, AND BRIDGE BOULEVARD SW.

THE SITE IS CURRENTLY DEVELOPED WITH FULLY DEVELOPED PROPERTIES SURROUNDING.

III. COMPUTATIONAL PROCEDURES

HYDROLOGIC ANALYSIS WAS PERFORMED UTILIZING THE DESIGN CRITERIA BASED ON CHAPTER 6, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL RELEASED 2020. TABLES WITHIN CHAPTER 6, WERE USED TO AID IN THE STUDY OF THE SITE HYDROLOGY.

IV. PRECIPITATION

THE STORM EVENT USED FOR THE FOLLOWING CALCULATIONS IS THE 100YR-6HR STORM. THE PROJECT SITE IS LOCATED IN ZONE 2 (EAST OF RIO GRANDE, AND WEST OF SAN MATEO).

V. EXISTING DRAINAGE CONDITIONS

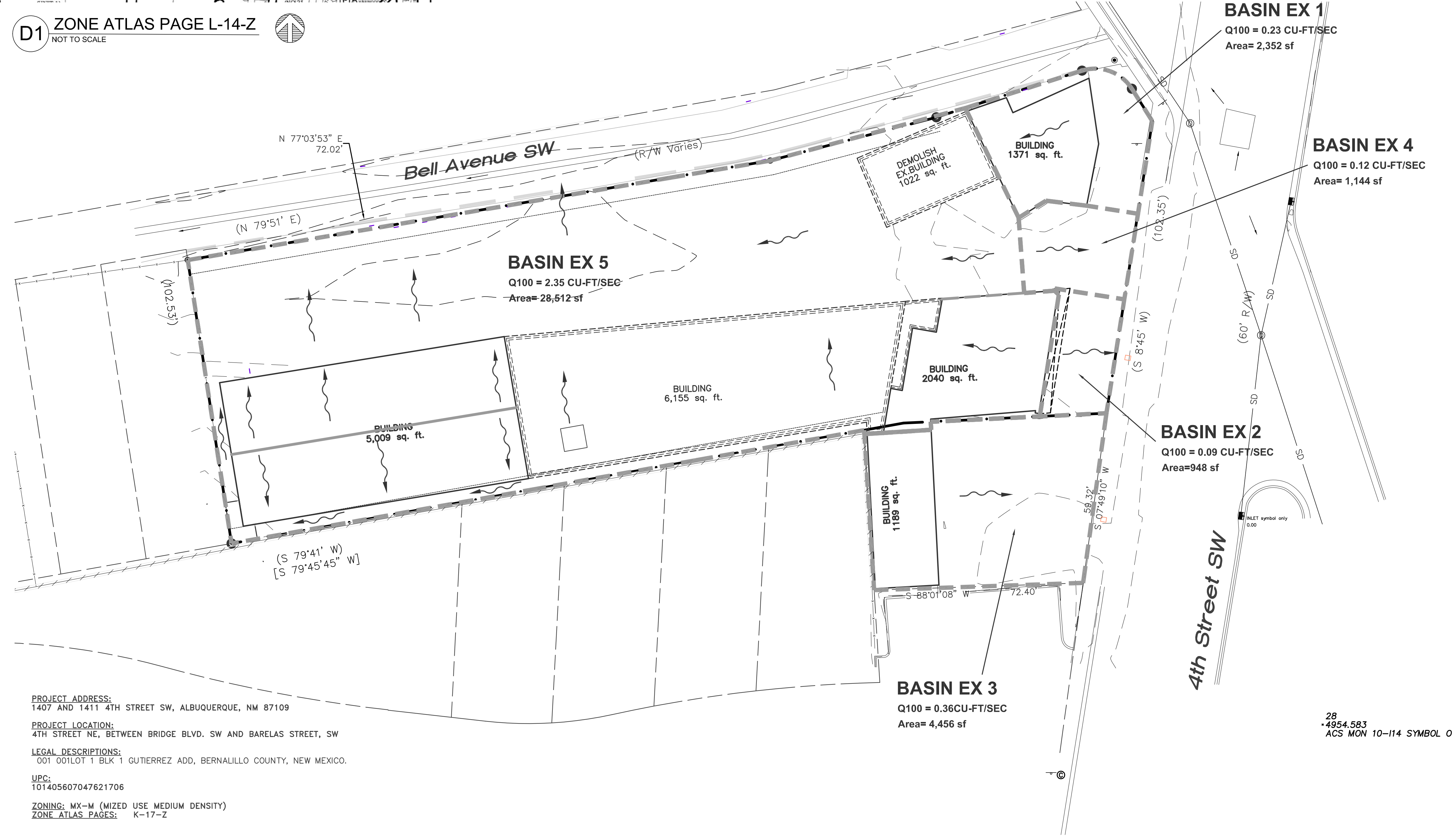
CURRENTLY THE SITE IS DEVELOPED WITH A SERIES OF WAREHOUSES ALONG THE SOUTHERN SIDE OF THE SITE. THESE WAREHOUSES HAVE A CENTER RIDGE ON THE ROOF AND RUNOFF DRAINS BOTH NORTH AND SOUTH. THE ADJACENT PARCEL HAS PLACED A CMU WALL ALONG THE LOT LINE THAT WILL DIRECT THE EXCESS RUNOFF FROM THE SOUTHERN HALF OF THE ROOF TO THE WEST WHERE IT WRAPS AROUND THE BUILDING AND FLOW TOWARD BELL AVENUE SW. THERE IS A GRAVEL PARKING ARE ON THE NORTH SIDE OF THE WAREHOUSE THAT ALSO DRAINS TOWARD BELL AVENUE SW. THE BUILDINGS THAT FRONT 4TH STREET SW GENERALLY SLOPE TO THE WEST. RUNOFF FROM THESE ROOFS WILL ALSO DRAIN INTO THE GRAVEL PARKING NEAR THE WAREHOUSE AND INTO BELL AVENUE SW. A SMALL RIDGE EXISTS BETWEEN THE TWO BUILDINGS THAT FRONT 4TH STREET SW. A SMALL PORTION OF THE SITE WILL DRAIN DIRECTLY TOWARD 4TH STREET. THERE IS ANOTHER SMALL PARCEL SOUTH OF THE MAIN PROJECT THAT WILL ALSO BE AFFECTED BY THIS PROJECT. NEW PARKING WILL BE ADDED ALONG 4TH STREET. THE TOTAL RUNOFF FROM THE NORTHERN PARCEL IS 2.80 CFS AND THE SOUTHERN PARCEL IS 0.36 CFS.

STAMP + SIGNATURE

DAVID A. AUBE
STATE OF NEW MEXICO
Professional Engineer
14221
Digital Stamp by David A Aube
www.davidaaube.com
David A Aube
The Hartman + Design Group, Inc.
Civil Engineer
Date: 2022.05.01 16:51:16-0700

KEY PLAN

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 04/07/22
BY: *Reina Brizuela*
Hydrologist # L14D063



PROJECT ADDRESS:
1407 AND 1411 4TH STREET SW, ALBUQUERQUE, NM 87109

PROJECT LOCATION:
4TH STREET NE, BETWEEN BRIDGE BLVD. SW AND BARELAS STREET, SW

LEGAL DESCRIPTIONS:
001 001LOT 1 BLK 1 GUTIERREZ ADD, BERNALILLO COUNTY, NEW MEXICO.

UPC:
101405607047621706

ZONING: MX-M (MIZED USE MEDIUM DENSITY)
ZONE ATLAS PAGES: K-17-Z



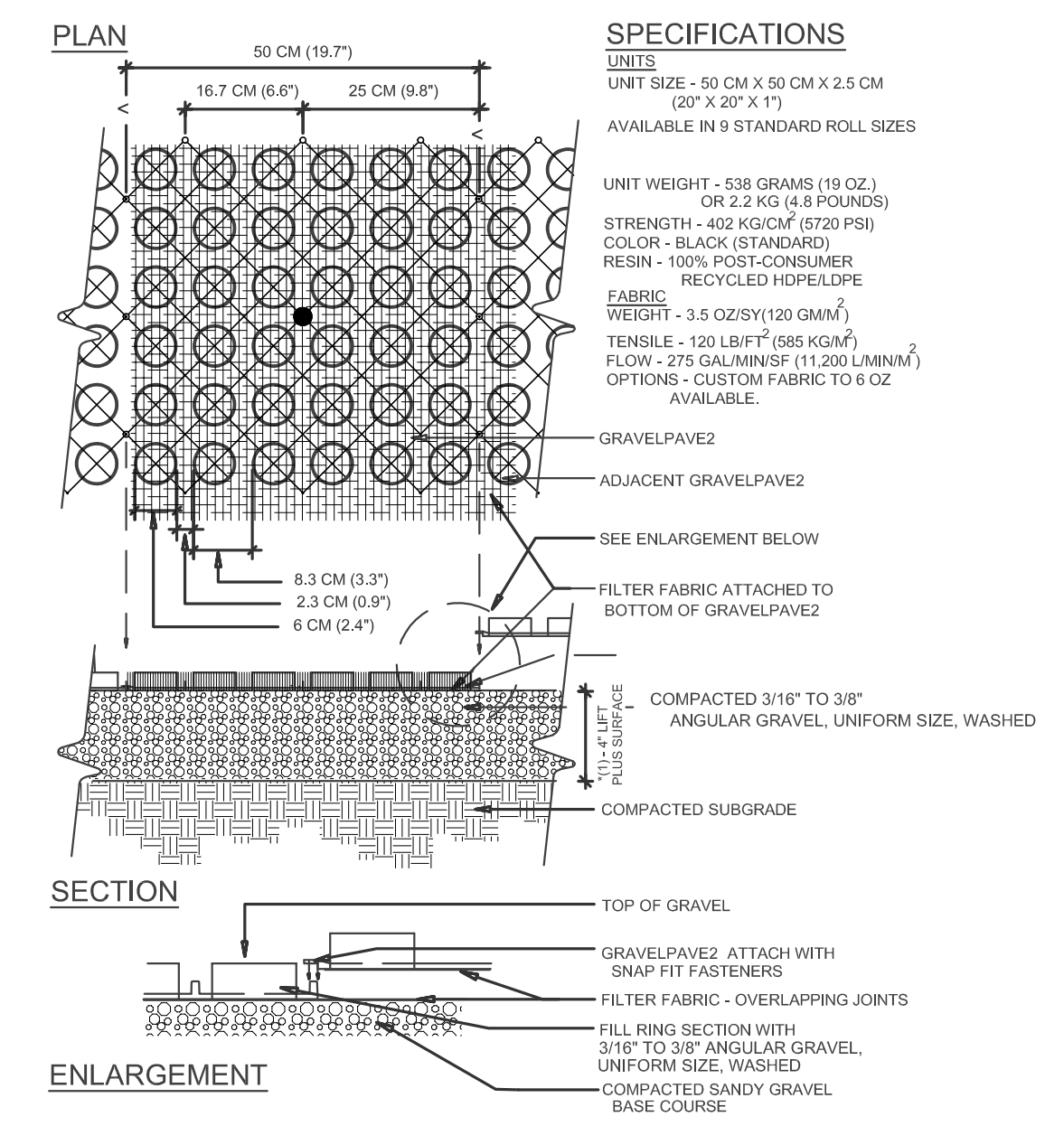
StormTech® MC-4500

Chamber Sizing

- Size (L x W x H) 52" x 100" x 60" 1321 mm x 2540 mm x 1524 mm
- Chamber Storage 106.5 ft³ (3.01 m³)
- Min. Installed Storage* 162.6 ft³ (4.60 m³)

Drainage Summary							
Project:	HOMEWISE COMMISSARY KITCHEN						
Project Number:	2703						
Date:	02/19/22						
By:	Dave						
Precipitation Zone	2 Per COA DPM Chapter 6						
Proposed summary							
Basin Name	Pro Basin 1	Pro Basin 2	Pro Basin 3	Pro Basin 4	Pro Basin 5	Pro Basin 6	Pro Basin 7
Area (sf)	2352	948	4456	1144	16332	8626	3356
%A Land treatment	0	0	0	0	0	0	0
%B Land treatment	0	0	35	0	50	55	0
%C Land treatment	0	0	10	40	0	0	0
%D Land treatment	100	100	55	60	50	45	100
Soil Treatment (acres)							
Area "A"	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area "B"	0.00	0.00	0.04	0.00	0.19	0.11	0.00
Area "C"	0.00	0.00	0.01	0.01	0.00	0.00	0.00
Area "D"	0.05	0.02	0.06	0.02	0.19	0.09	0.08
Excess Runoff (acre-feet)							
100yr. 6hr.	0.0105	0.0042	0.0142	0.0040	0.0489	0.0246	0.0150
10yr. 6hr.	0.0058	0.0027	0.0084	0.0024	0.0283	0.0139	0.0097
2yr. 6hr.	0.0045	0.0018	0.0049	0.0014	0.0158	0.0075	0.0053
100yr. 24hr.	0.0118	0.0048	0.0156	0.0044	0.0536	0.0269	0.0169
Peak Discharge (cfs)							
100 yr.	0.23	0.09	0.36	0.10	1.26	0.64	0.33
10yr.	0.15	0.06	0.20	0.06	0.69	0.34	0.21
2yr.	0.09	0.04	0.10	0.03	0.33	0.16	0.13
Water Quality Ponding Volume (cf)							
100 yr.	0.0	0.0	27.3	0.0	68.4	84.1	72.7
Water Quality Acre Feet							
100 yr.	0.0000	0.0000	0.0006	0.0000	0.0016	0.0019	0.0017

Pond Routing and Volumes				
Incoming Flow Rate	Qin	Pond B		
		Basin 1	Basin 2	
Allowable Discharge Rate	Qout	0.00	1.06	6.55 Total discharge
Hydrology Zone		2		2 per Figure A-1
Area Total	At	0.054	0.022	acres
Area Type A	Aa	0	0	0%
Area Type B	Ab	46	52	52%
Area Type C	Ac	0	0	0%
Area Type D Impervious	Ad	60	48	48%
Excess runoff rates				
A		0.53	0.53	
B		0.78	0.78	
C		1.13	1.13	
D		2.12	2.12	
Weighted E (Excess Runoff)		1.58	1.42	
Time of Concentration		0.2	1.2	hours
Time to Peak		0.223	0.933	hours
Time of Base		0.057	-0.079	hours
Time of Base		= 2.10" E / (Ad) + (25" Ad) / (12)		
Duration of Peak		0.150	0.120	hours
Time for end of peak		0.373	1.053	hours
Time when storage begins		0.000	0.610	hours
Time incoming is less than discharge		0.057	0.693	hours
Volume Required during storm	acre-inch	0.090	0.047	acre-inch
Volume Required during storm	cf	327	169	cubic feet
Volume Available in Basin	cf	327	202	Total Stored



REVISIONS		
No.	Description	Date

VI. PROPOSED DRAINAGE CONDITIONS

THE NEW BUILDING WILL REPLACE A PORTION OF THE WAREHOUSE SPACE THAT CURRENTLY OCCUPIES THE SITE. THE NEW BUILDING WILL HAVE A ROOF RIDGE THAT DRAIN APPROXIMATELY 1/2 OF THE ROOF TO THE EAST AND 1/2 TO THE WEST.

THE SITE HAS BEEN DIVIDED INTO 7 BASINS. BASINS PRO 1 - 4 GENERALLY MATCH THE EXISTING CONDITIONS AND DRAINAGE PATTERNS. BASINS PRO 1 AND PRO 2 WILL DRAIN TOWARD A NEW COURTYARD SPACE LOCATED ON THE EASTERN SIDE OF THE NEW BUILDING. WHEN COMBINED WITH BASIN PRO 6 THE TOTAL EXCESS RUNOFF THAT WILL DRAIN INTO THE COURTYARD WILL BE 1.04 CFS. THE GEOTECHNICAL ENGINEER HAS REQUESTED THAT WE STAY AT PONDING BE AT LEAST 15" FROM BUILDINGS. SUBSURFACE SOILS BELOW 4" DEEP ARE SANDY AND HAVE CAPACITY FOR VERTICAL AND HORIZONTAL INFILTRATION.

THE INFILTRATION CHAMBER ASSEMBLY WILL INCLUDE 2 SECTION (160CF EACH) AND THE END SECTIONS. THIS WILL REST ON A LAYER OF GRAVEL AND WILL BE SURROUNDED BY PEA GRAVEL (CAPACITY OF 162 CUBIC FEET) CAPACITY OF THE CHAMBERS AND SURROUNDING GRAVEL PLUS AREA DRAINS WILL EXCEED THE REQUIRED 327 CUBIC FEET OF WATER STORAGE.

TO REACH THIS LAYER, ADS INFILTRATION CHAMBERS WILL BE BURIED AND COVERED WITH PEA GRAVEL, FILTER FABRIC AND SOIL TO SUPPORT LANDSCAPING. AREAS WELLS WILL BE LOCATED AT EACH END OF THE INFILTRATION CHAMBERS. THIS WILL ALLOW FOR SURFACE DRAINAGE TO QUICKLY FLOW DOWN INTO THE INFILTRATION CHAMBERS. THE UNDERGROUND STORM WATER STORAGE HAS BEEN DESIGNED TO FULL RETENTION OF THE 100 YEAR 6 HOUR EVENT.

IF THE DESIGN STORM EXCEEDED, A SIDEWALK CULVERT HAS BEEN ADDED TO ALLOW FOR EXCESS RUNOFF TO FLOW INTO BELL AVENUE SW. THIS WILL OCCUR IS THE 100 YEAR, 6 HOUR EVENT IS EXCEEDED.

THE WESTERN PORTION OF THE SITE WILL FLOW OUT INTO A GRAVEL PARKING AREA (GRAVEL PAVE 2 SET AT 3" OF TOTAL GRAVEL DEPTH). THIS PONDING AREA (POND B) WILL COVER 3217 SF OF THE SITE AND WILL BE 3" DEEP. UTILIZING A 25% POROSITY THE WATER STORAGE INSIDE THE GRAVEL WILL BE 202 CUBIC FEET.

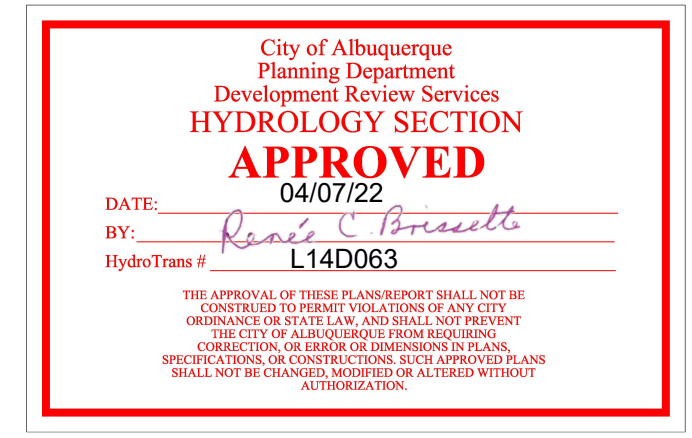
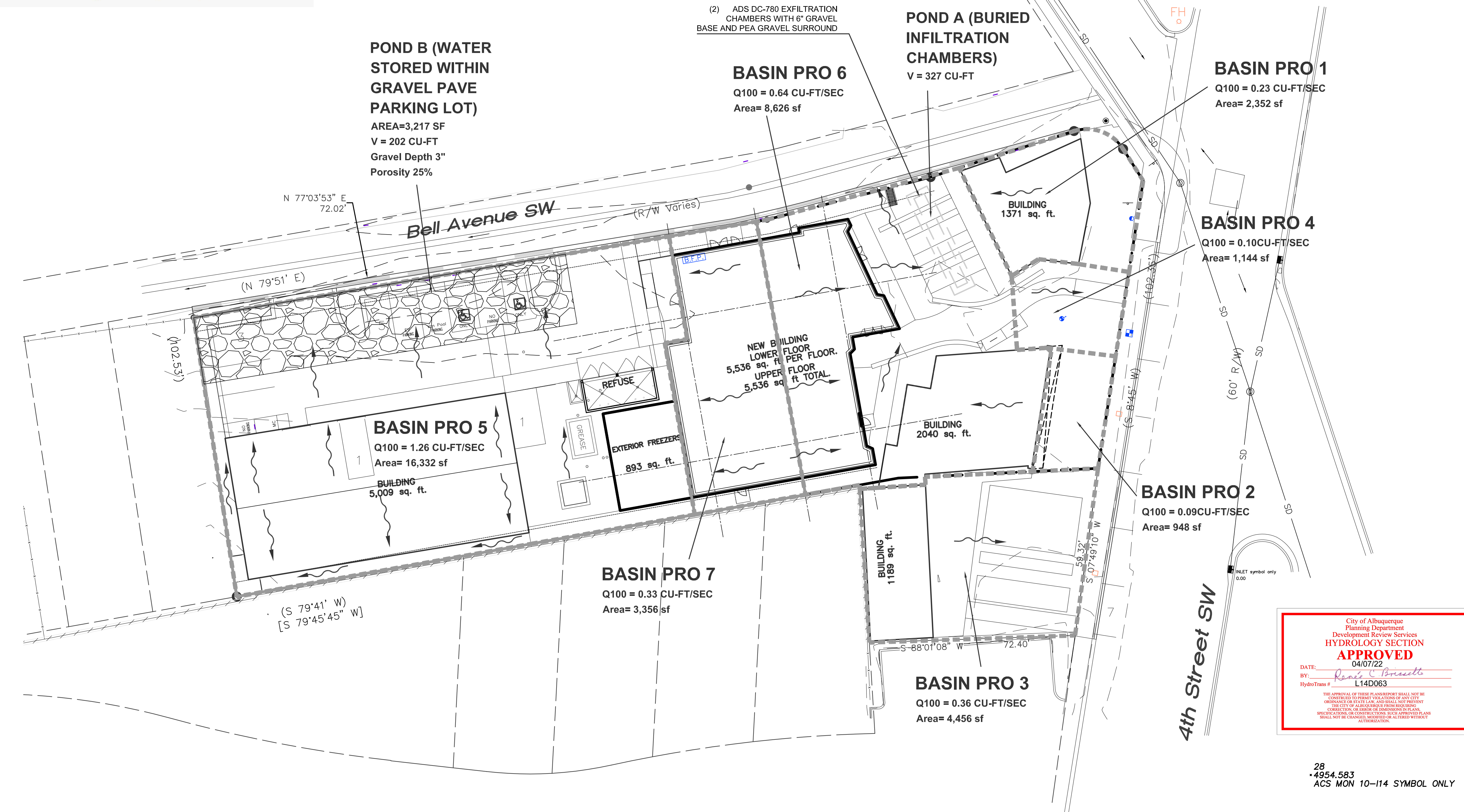
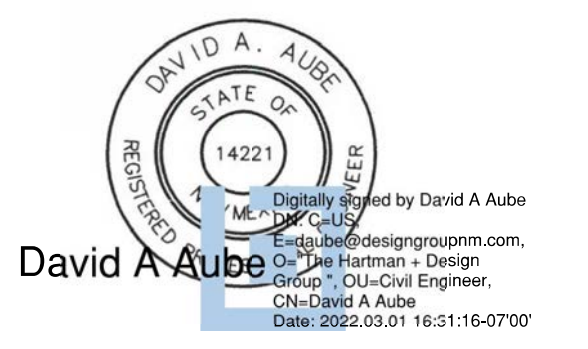
IF THE DESIGN STORM IS EXCEEDED, THE EXCESS RUNOFF WILL FLOW OUT THE DRIVEWAY AND INTO BELL AVENUE SW.

TOTAL DISCHARGE FROM THE SITE WILL BE 1.29 CFS (BASIN PRO 4, PRO 3, AND DISCHARGE FROM PRO 5).

VII. CONCLUSIONS

THE PROPOSED DEVELOPMENT WILL REDUCE THE EXCESS RUNOFF FROM THE NORTHERN PARCEL FROM 2.80 CFS TO 1.1 CFS. THE SOUTHERN PARCEL WILL REMAIN AS EXISTING AT 0.36 CFS. THE SITE WILL DISCHARGE LESS EXCESS RUNOFF IN THE REDEVELOPED CONDITION THAT IT DOES IN THE CURRENT CONDITION.

STAMP + SIGNATURE



28
4954.583
ACS MON 10-114 SYMBOL ONLY

No.	Description	Date
1	HYDRO COMMENTS	3-31-2022

GRADING PLAN GENERAL NOTES

1. SEE SHEET CG001 FOR COMPLETE LIST OF GENERAL NOTES AND SYMBOL/LINETYPE LEGEND THAT APPLY TO ALL SHEETS.

PROJECT ADDRESS:
1407 AND 1411 4TH STREET SW, ALBUQUERQUE, NM 87109

PROJECT LOCATION:
4TH STREET NE, BETWEEN BRIDGE BLVD. SW AND BARELAS STREET, SW

LEGAL DESCRIPTIONS:
001 001LOT 1 BLK 1 GUTIERREZ ADD, BERNALILLO COUNTY, NEW MEXICO.

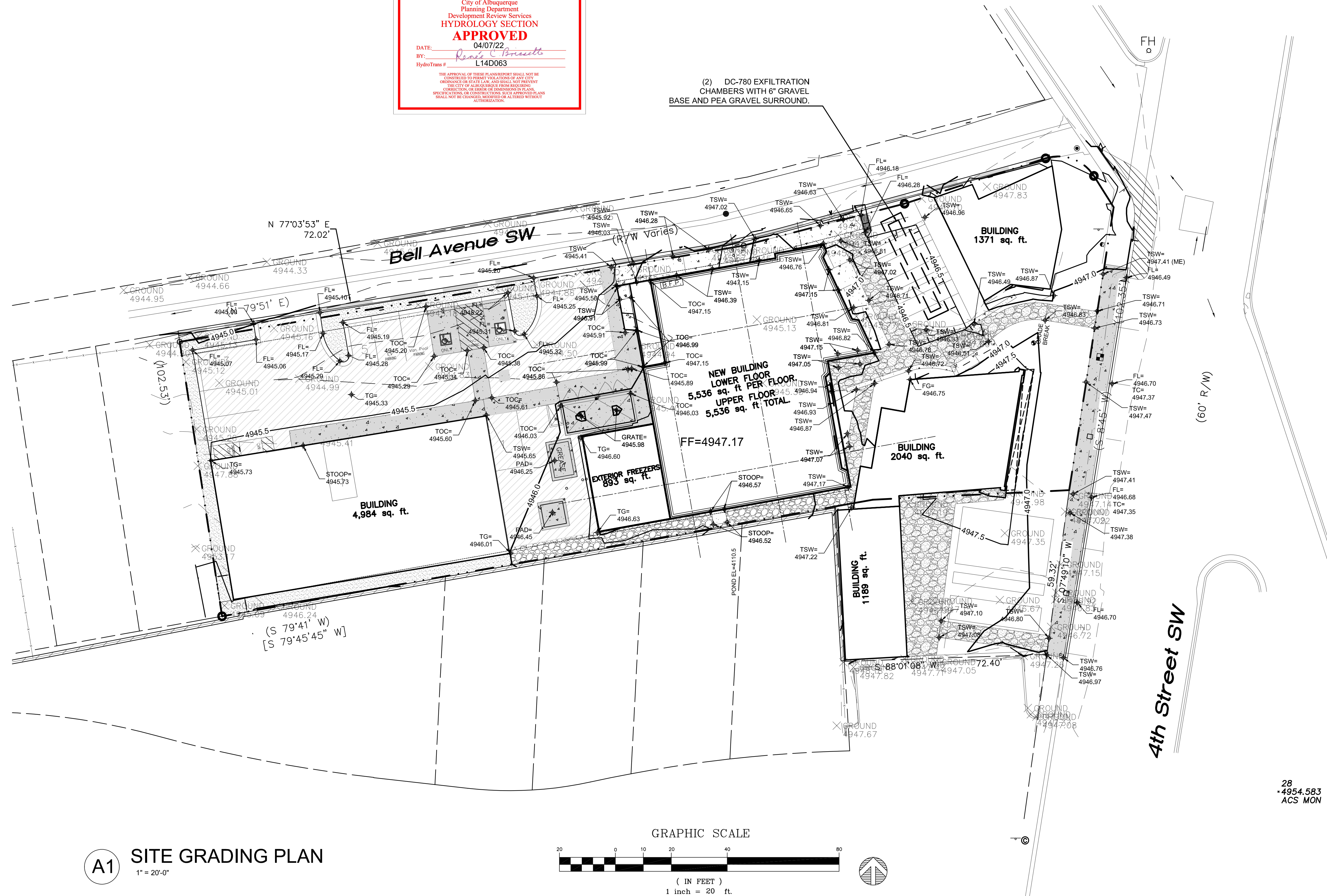
UPC:
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ZONING: MX-M (MIZED USE MEDIUM DENSITY)
ZONE ATLAS PAGES: K-17-Z

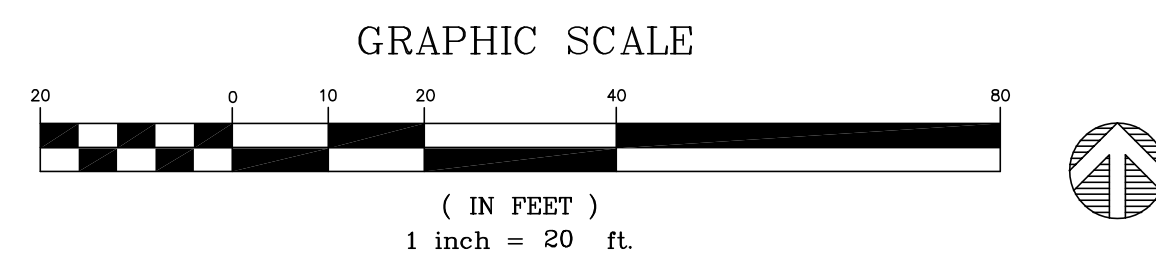
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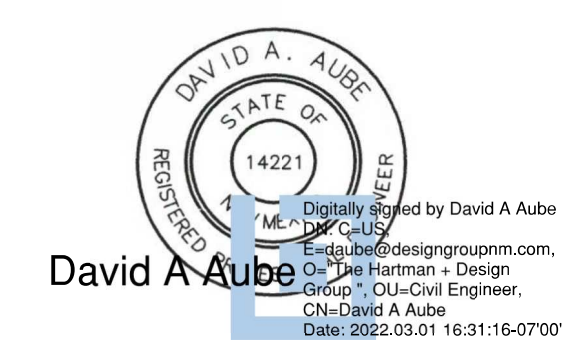
(2) DC-780 EXFILTRATION CHAMBERS WITH 6" GRAVEL BASE AND PEA GRAVEL SURROUND.



A1 SITE GRADING PLAN
1" = 20'-0"



STAMP + SIGNATURE



KEY PLAN

28
4954.583
ACS MON 10-114 SYMBOL ON

PERMIT SET

