

CITY OF ALBUQUERQUE

Hydrology Section Planning Department
David S. Campbell, Director



Timothy M. Keller, Mayor

May 15, 2019

Verlyn Miller, P.E.
Miler Engineering Consultants
3500 Comanche NE, Building F
Albuquerque, NM, 87107

RE: Fire Station #9
Conceptual Grading and Drainage Plan and Drainage Report
Engineer's Stamp Date: 05/02/2019
Hydrology File: H20D043

Mr. Miller,

Based upon the information provided in your submittal received 5/06/2019, the submittal is approved for Building Permit and Work Order. The 185 CF of required SWQV that does not drain to an onsite BMP, will be served by offsite BMPs constructed by the City Department of Municipal Development.

As a condition of approval, written permission is required from neighbors prior to the encroachment of any new wall, wall footer, or removal of any existing walls or fences on those adjacent properties. If permission is not obtained then keep all improvements including footers off of the neighbor's property.

Also as a condition of approval additional spot elevations will be required on the WO plans to demonstrate a water block on the east driveway that is a minimum of 0.87' measured perpendicular to the flow.

Prior to Certificate of Occupancy (CO) an Engineer's Certification must be submitted to Hydrology for review and approval.

If you have any questions, please contact me at 924-3986 or e-mail jhughes@cabq.gov.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Planning Dept.
Development and Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: COA Fire Station #9 **Building Permit #:** **Hydrology File #:** H20D043

DRB#: **EPC#:** 18-EPC-40037 **Work Order#:**

Legal Description: Port of Parcel D within Lt 23 Blk 31 Snow Heights Addn.

City Address: 9500 Snow Heights Circle NE, Albuquerque, NM 87112

Applicant: City of Albuquerque **Contact:**

Address: 1 Civic Plaza NW, Albuquerque, NM 87102

Phone#: 505-768-3000 **Fax#:** 505-768-3019 **E-mail:**

Other Contact: Miller Engineering Consultants, Inc. **Contact:** Verlyn A. Miller

Address: 3500 Comanche NE, Bldg. F, Albuquerque, NM 87107

Phone#: 505-888-7500 **Fax#:** 505-888-3800 **E-mail:** vmiller@mecnm.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: 5/6/19 **By:**

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



LETTER OF TRANSMITTAL

TO COA
Planning Department
Development & Building Services
Division – Design Review
600 2nd Street NW
Albuquerque, NM 87102

DATE 5/6/19	City Project No. 547692
ATTENTION: DOUG HUGHES, P.E., CFM	
RE: COA Fire Station #9	

Transmitted herein are the attached documents (noted below):

COPIES	DATE	NO.	DESCRIPTION
1			COA Application for Building Permit and Workorder Approval
2			Conceptual Grading & Drainage Plans Set
2			Drainage Report
1			PDF electronic copy sent to COA
1			Email of COA electronic copy
1			Transmittal Letter

THESE ARE TRANSMITTED as checked below:

☒ For Approval ☐ For Your Use ☐ As Requested ☐ For Review & Comment

☐ Other:

REMARKS: Project Engineer: Verlyn Miller

Copy Sent To: VA
MEC File

SIGNED: 

SUPPLEMENTAL DRAINAGE CALCULATIONS

Grading & Drainage Hydrology Report

AFD FIRE STATION #9
9500 SNOW HEIGHTS CIRCLE NE
ALBUQUERQUE, NM 87112

May 2, 2019

Prepared For: City of Albuquerque
Capital Implementation Program
Albuquerque, NM



Prepared By:



MILLER ENGINEERING CONSULTANTS

Engineers • Planners

3500 Comanche NE, Bldg. F
Albuquerque, New Mexico 87107
Phone: (505) 888-7500
Fax: (505) 888-3800

Worksheet for Rectangular Channel - 1

SOUTH CHANNEL

Project Description

Flow Element: Rectangular Channel
Friction Method: Manning Formula
Solve For: Normal Depth

Input Data

Roughness Coefficient: 0.015
Channel Slope: 0.00660 ft/ft
Bottom Width: 8.00 ft
Discharge: 44.00 ft³/s

Results

Normal Depth: 0.86 ft
Flow Area: 6.88 ft²
Wetted Perimeter: 9.72 ft
Top Width: 8.00 ft
Critical Depth: 0.98 ft
Critical Slope: 0.00442 ft/ft
Velocity: 6.39 ft/s
Velocity Head: 0.64 ft
Specific Energy: 1.50 ft
Froude Number: 1.22
Flow Type: Supercritical

GVF Input Data

Downstream Depth: 0.00 ft
Length: 0.00 ft
Number Of Steps: 0

GVF Output Data

Upstream Depth: 0.00 ft
Profile Description: N/A
Profile Headloss: 0.00 ft
Downstream Velocity: 0.00 ft/s
Upstream Velocity: 0.00 ft/s
Normal Depth: 0.86 ft
Critical Depth: 0.98 ft
Channel Slope: 0.00660 ft/ft
Critical Slope: 0.00442 ft/ft

Worksheet for Rectangular Channel - 1

North Channel

Project Description

Flow Element: Rectangular Channel
Friction Method: Manning Formula
Solve For: Normal Depth

Input Data

Roughness Coefficient: 0.013
Channel Slope: 0.00670 ft/ft
Bottom Width: 15.00 ft
Discharge: 22.00 ft³/s

Results

Normal Depth: 0.33 ✓ *8" CURB* ft
Flow Area: 5.02 ft²
Wetted Perimeter: 15.67 ft
Top Width: 15.00 ft
Critical Depth: 0.41 ft
Critical Slope: 0.00357 ft/ft
Velocity: 4.38 ft/s
Velocity Head: 0.30 ft
Specific Energy: 0.63 ✓ *8" CURB* ft
Froude Number: 1.34
Flow Type: Supercritical

GVF Input Data

Downstream Depth: 0.00 ft
Length: 0.00 ft
Number Of Steps: 0

GVF Output Data

Upstream Depth: 0.00 ft
Profile Description: N/A
Profile Headloss: 0.00 ft
Downstream Velocity: 0.00 ft/s
Upstream Velocity: 0.00 ft/s
Normal Depth: 0.33 ft
Critical Depth: 0.41 ft
Channel Slope: 0.00670 ft/ft
Critical Slope: 0.00357 ft/ft

Worksheet for Broad Crested Weir - 1

NORTH CHANNEL

Project Description

Flow Element: Broad Crested Weir
Solve For: Headwater Elevation

Input Data

Discharge:	21.88	ft ³ /s
Crest Elevation:	100.00	ft
Tailwater Elevation:	0.00	ft
Crest Surface Type:	Paved	
Crest Breadth:	10.00	ft
Crest Length:	12.00	ft

Results

Headwater Elevation:	100.71	ft
Headwater Height Above Crest:	0.71 → D = 8.5"	ft
Tailwater Height Above Crest:	-100.00	ft
Weir Coefficient:	3.03	US
Submergence Factor:	1.00	
Adjusted Weir Coefficient:	3.03	US
Flow Area:	8.56	ft ²
Velocity:	2.56	ft/s
Wetted Perimeter:	13.43	ft
Top Width:	12.00	ft

Worksheet for Broad Crested Weir - 1

SOUTH CHANNEL

Project Description

Flow Element: Broad Crested Weir
Solve For: Headwater Elevation

Input Data

Discharge:	40.00	ft ³ /s
Crest Elevation:	100.00	ft
Tailwater Elevation:	0.00	ft
Crest Surface Type:	Paved	
Crest Breadth:	10.00	ft
Crest Length:	17.00	ft

Results

Headwater Elevation:	100.84	ft
Headwater Height Above Crest:	0.84 ⇒ 10" DEPTH	ft
Tailwater Height Above Crest:	-100.00	ft
Weir Coefficient:	3.03	US
Submergence Factor:	1.00	
Adjusted Weir Coefficient:	3.03	US
Flow Area:	14.35	ft ²
Velocity:	2.79	ft/s
Wetted Perimeter:	18.69	ft
Top Width:	17.00	ft

Worksheet for Rectangular Weir - 1

SPILLWAYS $w = 5'$

Project Description

Flow Element: Rectangular Weir
Friction Method: Manning Formula
Solve For: Discharge

Input Data

Headwater Elevation:	0.50	ft
Crest Elevation:	0.00	ft
Tailwater Elevation:	0.00	ft
Weir Coefficient:	2.60	US
Crest Length:	5.00	ft
Number of Contractions:	0	

Results

Discharge:	4.60	$> Q_{100} \therefore \text{O.K.}$	ft ³ /s
Headwater Height Above Crest:	0.50		ft
Tailwater Height Above Crest:	0.00		ft
Flow Area:	2.50		ft ²
Velocity:	1.84		ft/s
Wetted Perimeter:	6.00		ft
Top Width:	5.00		ft

Worksheet for Broad Crested Weir - 1

Run Down

Project Description

Flow Element: Broad Crested Weir
Solve For: Crest Length

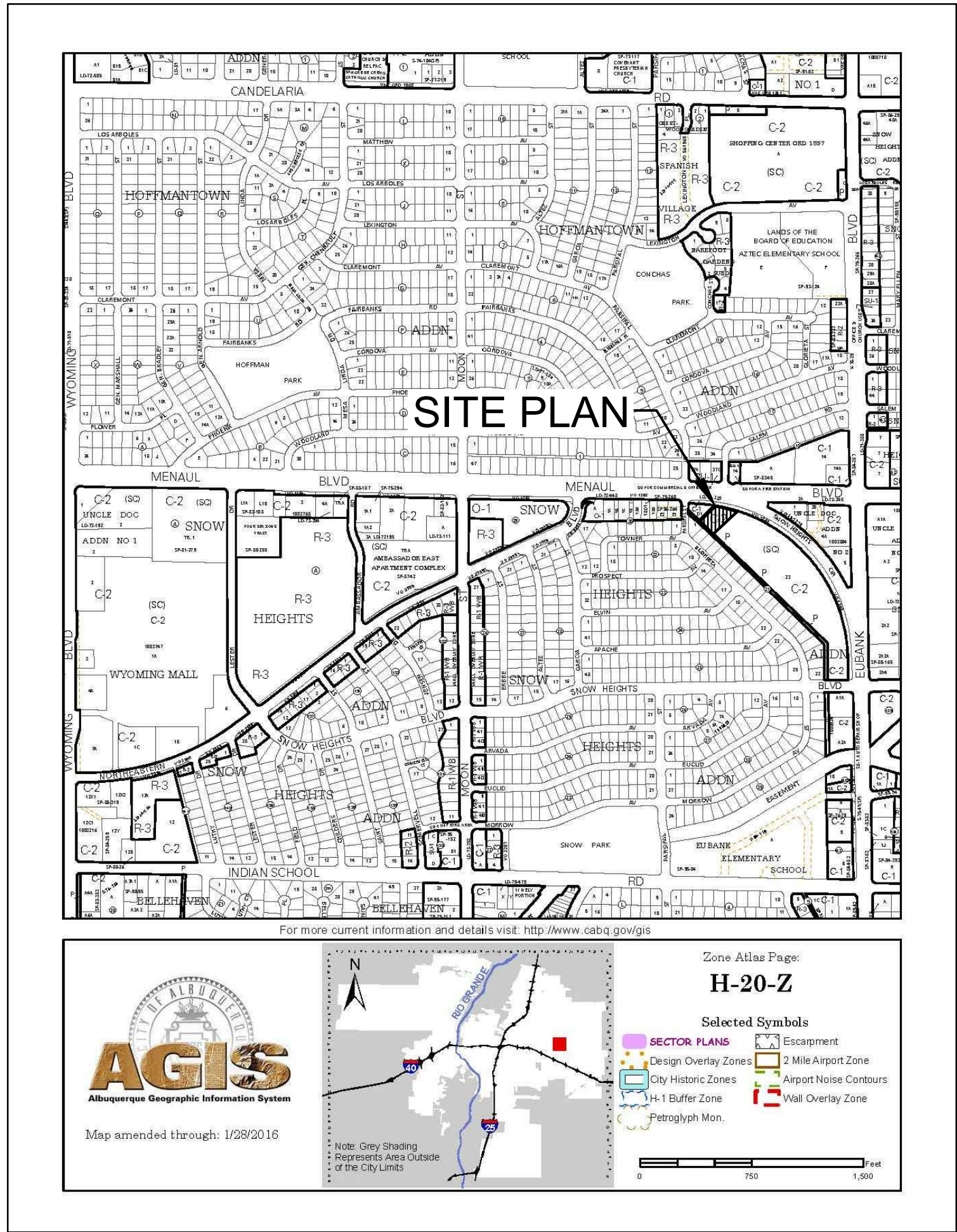
Input Data

Discharge:	5.00	ft ³ /s
Headwater Elevation:	100.50	ft
Crest Elevation:	100.00	ft
Tailwater Elevation:	0.00	ft
Crest Surface Type:	Paved	
Crest Breadth:	10.00	ft

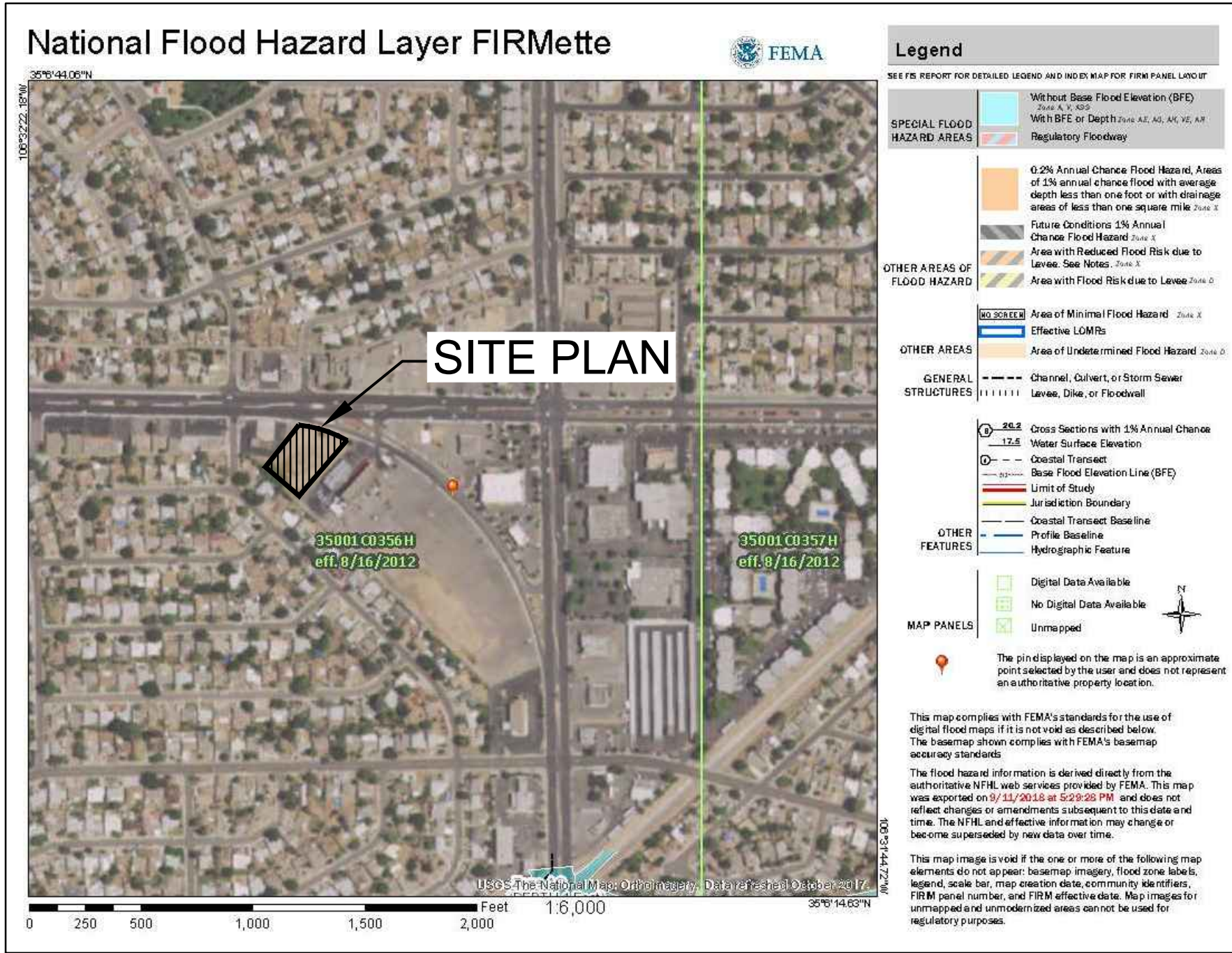
Results

Crest Length:	4.70	ft
Headwater Height Above Crest:	0.50	ft
Tailwater Height Above Crest:	-100.00	ft
Weir Coefficient:	3.01	US
Submergence Factor:	1.00	
Adjusted Weir Coefficient:	3.01	US
Flow Area:	2.35	ft ²
Velocity:	2.13	ft/s
Wetted Perimeter:	5.70	ft
Top Width:	4.70	ft

$W = 5'$



C1 VICINITY MAP
ZONE ATLAS MAP H-17-C



A1 FLOOD ZONE MAP
FLOOD ZONE MAP: 35001C0356H

SITE LOCATION

THE PROPOSED SITE IS LOCATED ON SNOW HEIGHTS CIRCLE STREET AND MENAUL BOULEVARD. THE SITE CURRENTLY CONSISTS OF A VACANT LOT WITH NO DEVELOPMENT. THE SITE IS BOUND BY MENAUL BLVD. AND SNOW HEIGHTS CIRCLE ON THE NORTH SIDE, RESIDENTIAL DEVELOPMENT ON THE SOUTH SIDE, AN EXISTING COMMERCIAL DEVELOPMENT ON THE EAST AND WEST SIDES. THE PROPOSED DEVELOPMENT WILL INCLUDE A NEW FIRE STATION.

EXISTING ON SITE CONDITIONS

THE EXISTING SITE IS CURRENTLY UNDEVELOPED AND IS COVERED WITH SPARSE VEGETATIVE COVER. THE LACK OF VEGETATION SUGGESTS THAT THE SITE IS EXPERIENCING DISTURBANCE FROM HUMAN ACTIVITY. THERE IS A SMALL LOW POINT AT THE WESTERN PORTION OF SITE WITH AN EXISTING DRAIN INLET. IT IS UNKNOWN IF THE INLET IS CONNECTED TO ANYTHING, IT APPEARS TO BE POSSIBLY CONNECTED TO SOME TYPE OF FRENCH DRAIN. EXISTING STORM WATER FLOWS SHEET FLOW WEST TOWARD THE EXISTING LOW POINT. THERE IS A SIGNIFICANT OFFSITE DRAINAGE BASIN OF APPROXIMATELY 10 ACRES THAT DISCHARGE TO THE SOUTHWEST CORNER OF THE SITE. THE OFFSITE FLOWS ARE ROUTED THROUGH THE WESTERN PORTION OF THE SITE NORTH TO THE ADJACENT PROPERTY AND EVENTUALLY DOWNSTREAM TO PARSIFAL STREET.

PROPOSED CONDITIONS

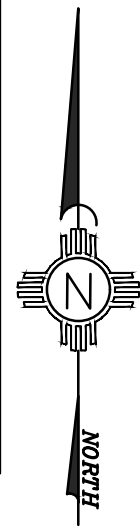
THE PROPOSED IMPROVEMENTS WILL INCLUDE A NEW FIRE STATION, DRIVEWAY, ASSOCIATED PARKING, AND CONCRETE HARDSCAPE. SITE DRAINAGE FROM BASIN A WILL BE ROUTED VIA OVERLAND FLOW TOWARD WATER HARVEST AREA (WATER QUALITY POND) LOCATED NEAR THE SOUTH WESTERN EDGE OF THE SITE. THIS WATER HARVESTING AREA WILL BE USED TO MANAGE THE 90TH PERCENTILE STORM EVENTS (SEE REQUIRED VOLUME BELOW). OVERFLOW FROM THE PONDING AREA WILL SPILL THROUGH A CONCRETE SPILLWAY ON THE PROPOSED WALL OF THE CHANNEL. SITE DRAINAGE FROM BASIN B WILL DISCHARGE INTO MENAUL BLVD. OFFSITE DRAINAGE TO THE SITE WILL BE COLLECTED IN A NEW TRAPEZOIDAL CONCRETE CHANNEL SYSTEM AND ROUTED THROUGH THE SITE TO ITS HISTORICAL LOCATION.

CONCLUSION

THE INCREASED RUNOFF FROM THE PROPOSED BUILDING ADDITION IS ESTIMATED AT 0.059 ACRE- FEET AND 0.69 CFS DURING THE 100-YEAR EVENT. THE MAJORITY OF THE INCREASED RUNOFF FROM THE PROPOSED PROJECT WILL BE RETAINED BY THE WATER HARVEST PONDING AREA, WHICH WILL HELP ALLEVIATE INCREASED FLOW DOWNSTREAM. THE INCREASE IN STORM WATER RUNOFF FROM THE PROPOSED PROJECT IS MINIMAL SHOULD NOT ADVERSELY IMPACT ADJACENT OR DOWNSTREAM PROPERTIES, PARTICULARLY WITH THE WATER HARVEST POND IN PLACE. THIS PLAN DOES NOT CHANGE HISTORICAL DRAINAGE PATTERNS.

THE PROPOSED WATER HARVEST AREA VOLUME IS APPROXIMATELY 2200 CUBIC FEET, WHICH IS GREATER THAN THE REQUIRED FIRST FLUSH VOLUME OF 1035 CUBIC FEET. THE MAJORITY OF THE ROOF DRAINAGE AND PROPOSED ASPHALT PARKING AREAS WILL DISCHARGE INTO THE WATER HARVEST AREA LOCATED AT THE SOUTHWEST SIDE OF THE PROJECT SITE.

THE DRAINAGE PATTERNS TO DOWNSTREAM PROPERTIES WILL REMAIN UNCHANGED FROM EXISTING CONDITIONS.



B1 OFF SITE-1 MAP
ZONE ATLAS MAP H-20-C

DRAINAGE DATA

HYDROLOGY										
Precipitation Zone 3 - 100-year Storm			P(360) =		2.6 in		P(1440) =		3.1 in	
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)	
		A	B	C	D					
Existing Conditions										
OS-1	8.10	0.00	0.00	0.81	7.29	2.25	1.521	1.825	39.39	
OS-2	4.50	0.00	0.00	0.45	4.05	2.25	0.845	1.014	21.88	
Site	1.20	0.00	0.00	0.80	0.40	1.65	0.165	0.181	4.77	
Total	13.80								66.04	
Proposed Conditions										
A	1.00	0.00	0.00	0.31	0.69	2.03	0.169	0.198	4.53	
B	0.20	0.00	0.00	0.05	0.15	2.09	0.035	0.041	0.93	
Total	1.20								5.46	

GENERAL NOTES:

- EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY CSI CARTESIAN SURVEYS, INC. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- ACS STA A-438 BENCH MARK THE TOP OF A STAINLESS STEEL ROD SET BENEATH A 5-1/2" NGS ACCESS COVER STAMPED "A-438 1984" SET FLUSH WITH THE GROUND, LOCATED IN THE NORTHWEST QUADRANT OF MENAUL BOULEVARD AND THE A.T. & S.F. RAILROAD TRACKS INTERSECTION. ELEV. 4975.35 (NAVD 1988)
- TBM FOUND 1/2" REBAR WITH CAP "LS 11463" ELEV. 4965.21
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
- ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

SPECIAL ORDER 19
DRAINAGE FACILITIES WITHIN THE CITY
RIGHT-OF-WAY NOTICE TO CONTRACTOR

- 1) AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.

SURVEY INFORMATION		FIELD NOTES		BENCH MARKS		AS-BUILT INFORMATION	
NO.	BY	DATE				CONTRACTOR	DATE
						WORKS BY	DATE
						SURVEYORS	DATE
						ACCEPTANCE BY	DATE
						FIELD	DATE
						CONNECTION BY	DATE
						DRAWINGS	DATE
						CONNECTED BY	DATE
						MICRO-FILM INFORMATION	DATE
						RECORDED BY	DATE
						NO.	DATE

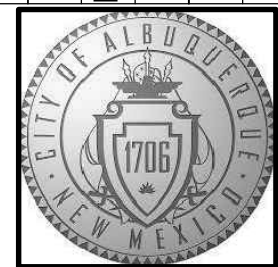
SEAL

NOT FOR CONSTRUCTION

DESIGNED BY: DATE

DRAWN BY: DATE

CHECKED BY: DATE



CITY OF ALBUQUERQUE
CAPITAL IMPLEMENTATION PROGRAM

AFD FIRE STATION 9

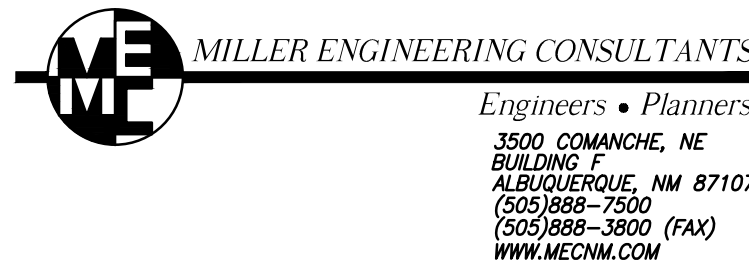
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ALBUQUERQUE, NM 87112

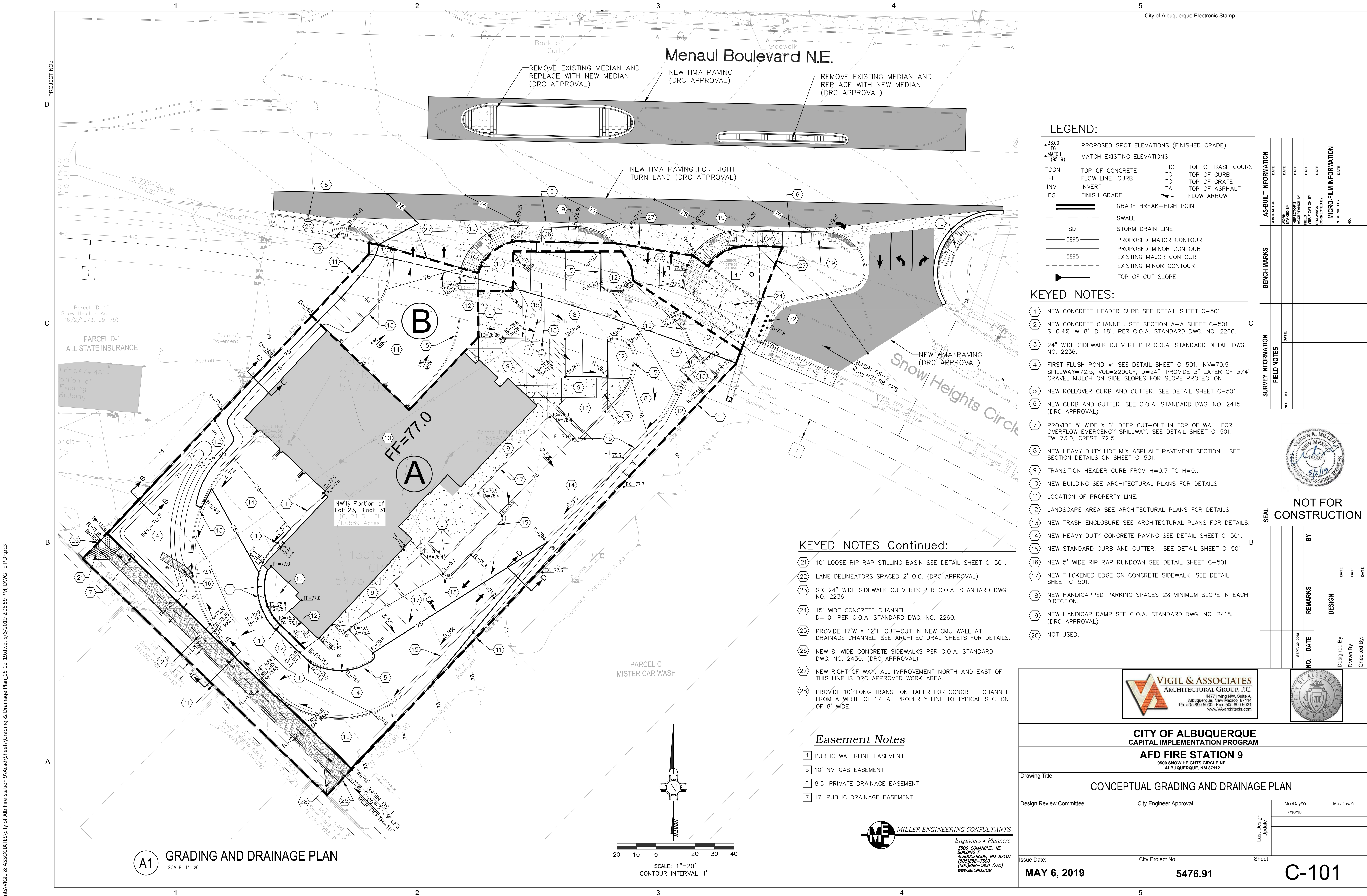
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Grading and Drainage Hydrology Report

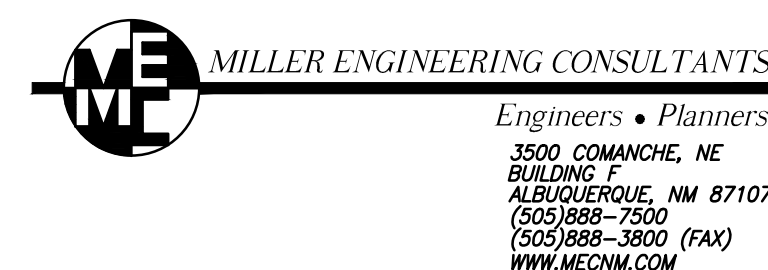
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
			7/10/18	
Issue Date:	City Project No.	Sheet		
MAY 6, 2019	5476.91			

C-100



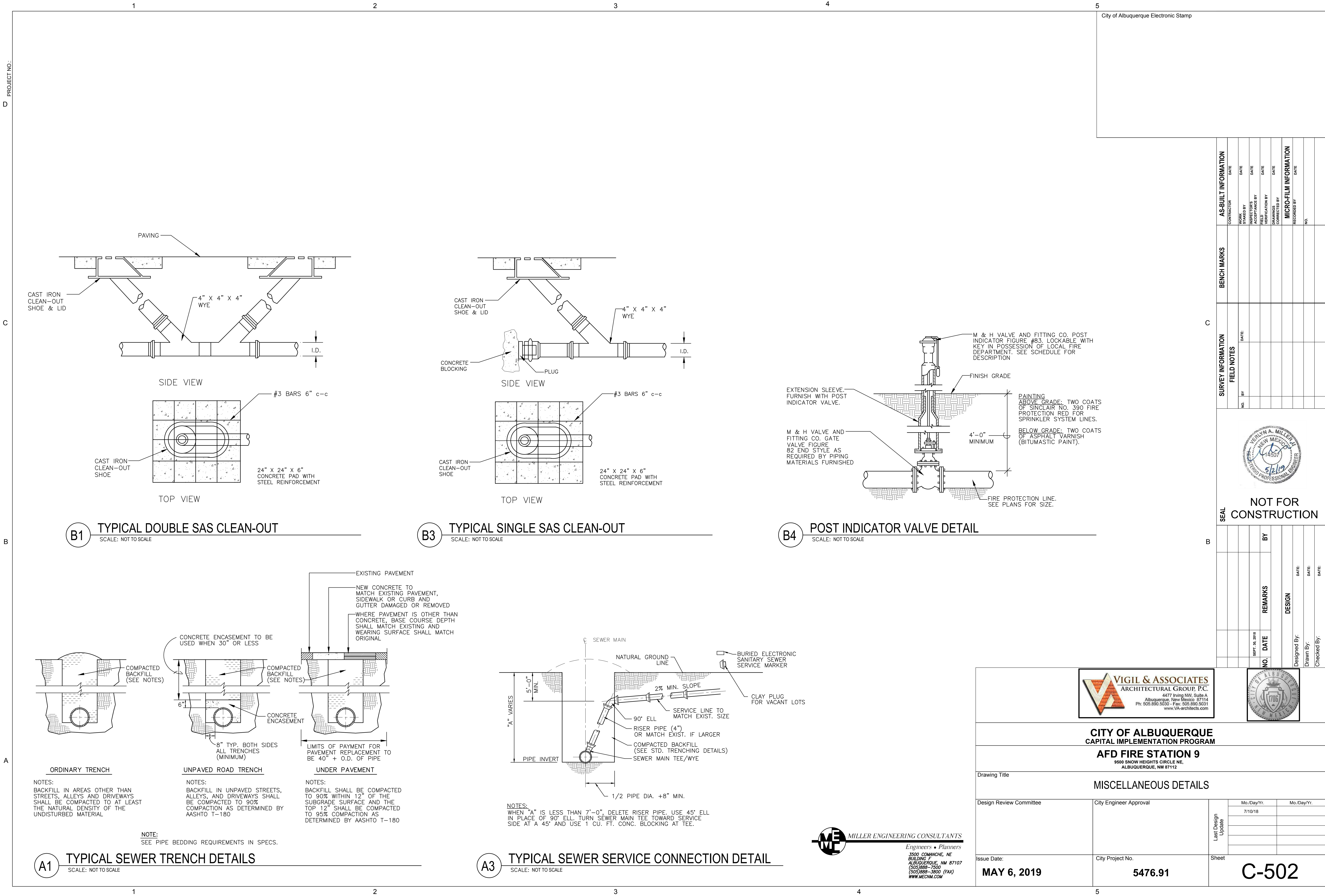


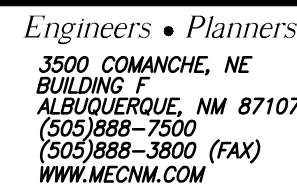
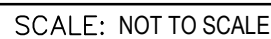
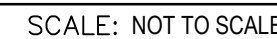
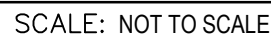
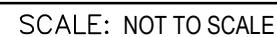
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Sheet

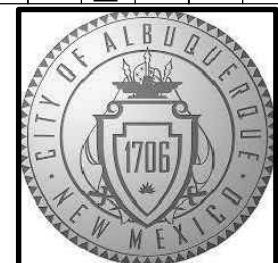
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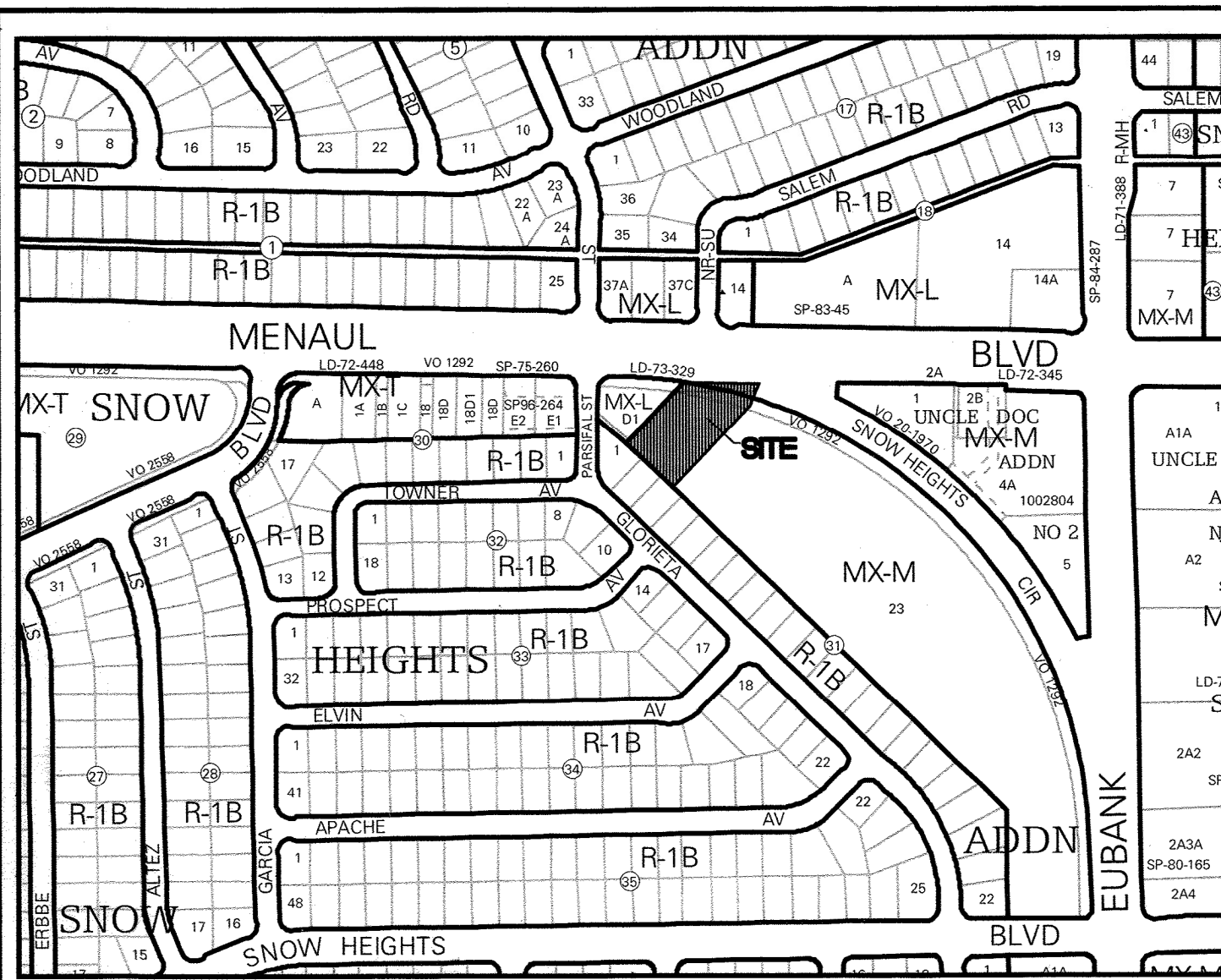




REAL NOT FOR CONSTRUCTION



C-503



Vicinity Map - Zone Atlas H-20-Z

Purpose of Plat

- SUBDIVIDE AS SHOWN HEREON.
- GRANT EASEMENTS AS SHOWN HEREON.

Subdivision Data

GROSS ACREAGE. 1.1908 ACRES
ZONE ATLAS PAGE NO. H-20-Z
NUMBER OF EXISTING LOTS. 1
NUMBER OF LOTS CREATED. 1
MILES OF FULL-WIDTH STREETS. 0.000 MILES
MILES OF HALF-WIDTH STREETS. 0.000 MILES
RIGHT-OF-WAY DEDICATION TO THE CITY OF ALBUQUERQUE. 0.000 ACRES
DATE OF SURVEY. APRIL 2018

Notes

- FIELD SURVEY PERFORMED IN APRIL 2018.
- ALL DISTANCES ARE GROUND DISTANCES: US SURVEY FOOT.
- THE BASIS OF BEARINGS REFERENCES NEW MEXICO STATE PLANE COORDINATES (NAD 83-GROUND-CENTRAL ZONE).
- LOT LINES TO BE ELIMINATED SHOWN HEREON AS

Free Consent

THE SUBDIVISION HEREON DESCRIBED IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER(S) AND/OR PROPRIETOR(S) THEREOF. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO ALL OF THE FOREGOING AND DO HEREBY CERTIFY THAT THIS SUBDIVISION IS THEIR FREE ACT AND DEED. SAID OWNER(S) WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE IN FEE SIMPLE TO THE LAND SUBDIVIDED.

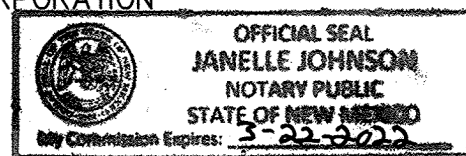
SARITA NAIR, JD, MCRP, CHIEF ADMINISTRATIVE OFFICER
CITY OF ALBUQUERQUE, A NEW MEXICO MUNICIPAL CORPORATION

STATE OF NEW MEXICO }
COUNTY OF }

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON April 17, 2019
BY: SARITA NAIR, JD, MCRP, CHIEF ADMINISTRATIVE OFFICER
CITY OF ALBUQUERQUE, A NEW MEXICO MUNICIPAL CORPORATION

By: [Signature]
NOTARY PUBLIC

MY COMMISSION EXPIRES 3-22-2022



Indexing Information

Section 8, Township 10 North, Range 4 East, N.M.P.M.
Subdivision: Snow Heights Addition
Owner: City of Albuquerque
UPC #: 102005944024341526

Utility Approvals:

PNM Electric Services
Natalia Antolin
Qwest Corp. d/b/a CenturyLink QC
New Mexico Gas Company
Comcast

Treasurer's Certificate

THIS IS TO CERTIFY THAT THE TAXES ARE CURRENT AND
PAID ON UPC #: 102005944024341526
PROPERTY OWNER OF RECORD

3-29-19 [Signature]
BERNALILLO COUNTY TREASURER'S OFFICE

3/29/19

3/29/19

4/2/19

DOCH 2019031039
04/19/2019 09:26 AM Page: 1 of 3
PLAT R-825, 00 B, 2019C P. 0055 Linda Stover, Bernalillo County

Legal Description

A CERTAIN PARCEL OF LAND BEING COMPRISED OF A NORTHWESTERLY PORTION OF LOT NUMBERED TWENTY-THREE (23), IN BLOCK NUMBERED THIRTY-ONE (31), OF THE SNOW HEIGHTS ADDITION TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF SAID ADDITION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON NOVEMBER 30, 1953 (SAID PARCEL OF LAND ALSO BEING IDENTIFIED AS AN EASTERLY PORTION OF PARCEL LETTERED "D", AS SHOWN AND DESIGNATED ON THE "TAX PURPOSE MAP SHOWING PORTION OF LOT 23, BLOCK 31, OF THE SNOW HEIGHTS ADDITION", FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON AUGUST 25, 1972, IN BOOK C08, PAGE 175; SAID MAP WAS FILED FOR TAX PURPOSES ONLY); TOGETHER WITH A SOUTHERLY TWENTY-TWO FOOT (22') PORTION OF VACATED SNOW HEIGHTS CIRCLE N.E. RIGHT-OF-WAY PER ORDINANCE 1292 V-153 AND AN ADDITIONAL PORTION OF SNOW HEIGHTS CIRCLE VACATED BY DRB PROJECT # 1001081, APPLICATION # 18DRB-70038;

BEING MORE PARTICULARLY DESCRIBED TOGETHER BY METES AND BOUNDS SURVEY AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THE HEREIN DESCRIBED PARCEL, BEING A POINT ON THE SOUTHERLY RIGHT-OF-WAY OF MENAUL BOULEVARD NE, MARKED BY A PK NAIL WITH TAG "LS 14271" WHENCE A TIE TO ACS MONUMENT "12-H20" BEARS N 76°06'02" W, A DISTANCE OF 313.49 FEET;

THENCE, COINCIDING SAID SOUTHERLY MENAUL RIGHT-OF-WAY, THE FOLLOWING 9 COURSES:

S 80°58'10" E, A DISTANCE OF 5.60 FEET TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

S 73°58'33" E, A DISTANCE OF 52.39 FEET, TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

27.49 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 22.89, A DELTA OF 68°48'25", AND A CHORD BEARING N 51°45'26" E, A DISTANCE OF 25.86 FEET, TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

S 88°56'23" E, A DISTANCE OF 51.08 FEET, TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

S 80°32'10" E, A DISTANCE OF 39.40 FEET, TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

S 54°40'37" E, A DISTANCE OF 9.18 FEET, TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

19.04 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 19.96, A DELTA OF 54°38'46", AND A CHORD BEARING N 59°20'13" E, A DISTANCE OF 18.32 FEET, TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

N 77°21'14" E, A DISTANCE OF 4.67 FEET TO AN ANGLE POINT, MARKED BY A BATHEY MARKER "LS 14271";

S 88°46'53" E, A DISTANCE OF 18.31 FEET TO THE NORTHEAST CORNER OF THE HEREIN DESCRIBED PARCEL, ALSO BEING THE SOUTHERLY MENAUL RIGHT-OF-WAY, MARKED BY A PK NAIL WITH TAG "LS 14271";

THENCE, LEAVING SAID SOUTHERLY MENAUL RIGHT-OF-WAY, S 21°37'26" W, A DISTANCE OF 64.41 FEET TO AN ANGLE POINT BEING A POINT MARKED BY A PK NAIL WITH TAG "LS 14271";

THENCE, S 43°27'01" W, A DISTANCE OF 305.50 FEET TO THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED PARCEL, MARKED BY A PK NAIL WITH TAG "LS 14271";

THENCE, N 45°55'42" W, A DISTANCE OF 174.53 FEET TO THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED PARCEL, MARKED BY A CONCRETE NAIL WITH SHINER IN FACE OF WALL;

THENCE, N 43°10'49" E, A DISTANCE OF 214.71 FEET TO AN ANGLE POINT, MARKED BY A BATHEY MARKER WITH CAP "LS 14271";

THENCE, N 00°29'14" E, A DISTANCE OF 5.78 FEET TO THE POINT OF BEGINNING, CONTAINING 1.1908 ACRES (51,871 SQ. FT.), MORE OR LESS.

Documents

- TITLE SEARCH REPORT PROVIDED BY STEWART TITLE, HAVING FILE NO. 01147-45318 AND AN EFFECTIVE DATE OF MARCH 29, 2018.
- TAX PURPOSE MAP SHOWING PORTION OF LOT 23, BLOCK 31, SNOW HEIGHTS ADDITION FILED IN THE BERNALILLO COUNTY CLERK'S OFFICE ON AUGUST 25, 1972, IN BOOK C8, PAGE 175.

Plat for
Lot 23-A, Block 31
Snow Heights Addition
Being Comprised of
Northerly Portion of Lot 23, Block 31,
Snow Heights Addition and
Portions of Vacated Snow
Heights Circle Right of Way
City of Albuquerque
Bernalillo County, New Mexico
March 2019

Project Number: PR-2018-001431

Application Number: SD-2019-00055

City Approvals:

Soon M. Riechman P.S. 3/25/19
City Surveyor
Ragunath M. M. 3/27/19
Traffic Engineer
Thistle Card 03-06-19
ABCWUA
NA
Parks and Recreation Department
Nichole Griedt 4/3/19
AMAFCA
James D. Hughes 3-06-19
City Engineer
4/4/2019
DRE Chairperson, Planning Department
4-3-2019
Real Property Division
3/6/19
Code Enforcement

Solar Collection Note

NO PROPERTY WITHIN THE AREA OF REQUESTED FINAL ACTION SHALL AT ANY TIME BE SUBJECT TO A DEED RESTRICTION, COVENANT, OR BUILDING AGREEMENT PROHIBITING SOLAR COLLECTORS FROM BEING INSTALLED ON BUILDINGS OR ERECTED ON THE LOTS OR PARCELS WITHIN THE AREA OF PROPOSED PLAT, THE FOREGOING REQUIREMENT SHALL BE A CONDITION TO APPROVAL OF THIS PLAT.

Surveyor's Certificate

I, WILL PLOTNER JR., A REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PLAT AND DESCRIPTION WERE PREPARED BY ME OR UNDER MY SUPERVISION, SHOWS ALL EASEMENTS AS SHOWN ON THE PLAT OF RECORD OR MADE KNOWN TO ME BY THE OWNERS AND/OR PROPRIETORS OF THE SUBDIVISION SHOWN HEREON, THE UTILITY COMPANIES OR OTHER INTERESTED PARTIES AND MEETS THE MINIMUM REQUIREMENTS FOR MONUMENTATION AND SURVEYS OF THE ALBUQUERQUE SUBDIVISION ORDINANCE, AND FURTHER MEETS THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Will Plotner Jr. 3/20/19
Will Plotner Jr.
N.M.R.P.S. No. 14271
Date
CSI-CARTESIAN SURVEYS INC.
P.O. BOX 44414 RIO RANCHO, N.M. 87174
Phone (505) 896-3050 Fax (505) 891-0244
Sheet 1 of 3
180642



2019C-35

(11)

Plat for Lot 23-A, Block 31 Snow Heights Addition

Being Comprised of
Northerly Portion of Lot 23, Block 31,
Snow Heights Addition and
Portions of Vacated Snow
Heights Circle Right of Way
City of Albuquerque
Bernalillo County, New Mexico
March 2019

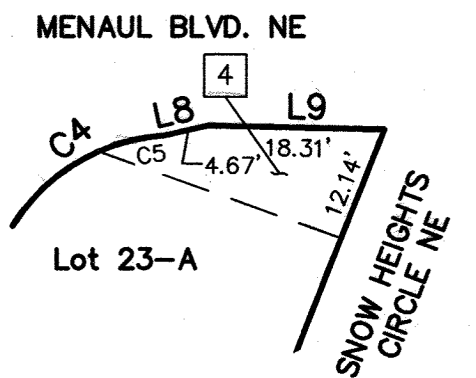
ACS Monument "12_H20"
NAD 1983 CENTRAL ZONE
X=1554536.037 *
Y=1495091.167 *
Z=5470.327 * (NAVD 1988)
G-G=0.999650645
Mapping Angle=-0°09'54.55"

* U.S. SURVEY FOOT

DOCH 2019031039

04/18/2019 09:26 AM Page: 2 of 3
PLAT R \$25.00 B: 2019C P: 0035 Linda Stover, Bernalillo County

Detail A



Line Table		
Line #	Direction	Length (ft)
L1	N 43°27'15" E	15.11'
L2	N 00°29'14" E	5.78'
L3	S 80°58'10" E	5.60'
L4	S 73°58'33" E	52.39'
L5	S 88°56'23" E	51.08'
L6	S 80°32'10" E	39.40'
L7	S 54°40'37" E	9.18'
L8	N 77°21'14" E	4.67'
L9	S 88°46'53" E	18.31'
L10	S 21°37'26" W	64.41'

Curve Table					
Curve #	Length	Radius	Delta	Chord Length	Chord Direction
C1	140.06'	1162.11'	6°54'20"	139.98'	S 72°36'12" E
C2	132.11'	1172.11'	6°27'29"	132.04'	S 72°22'23" E
C3	27.49'	22.89'	68°48'25"	25.86'	N 51°45'26" E
C4	19.04'	19.96'	54°38'46"	18.32'	N 59°20'13" E
C5	7.08'	19.96'	20°19'22"	7.04'	N 76°29'55" E

Easement Notes

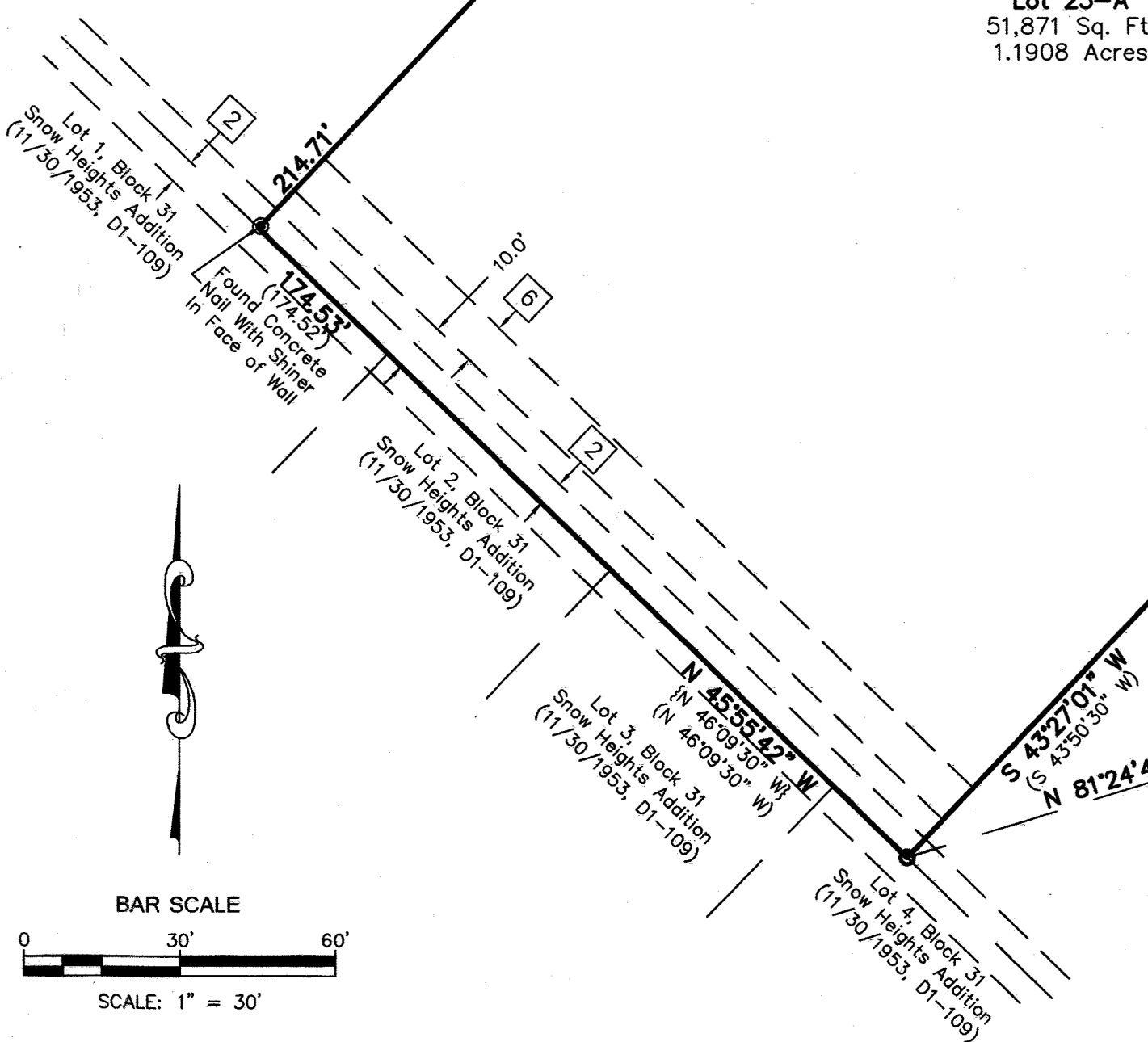
- THE WESTERLY 10 FEET OF THE 22 FOOT VACATION RESERVED FOR UTILITIES, PER VACATION ORDINANCE NO. 1292 (12/23/1957, V-153, BK. MISC. 24, PG. 73) SHOWN HEREON AS [Pattern]
- EXISTING 5' UTILITY EASEMENT (11/30/1953, D1-109)
- EXISTING 10' X 30' ANCHOR ESMT. (6/21/1973, C9-75)
- PUBLIC WATERLINE EASEMENT TO THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY GRANTED WITH THE FILING OF THIS PLAT
- 10' NM GAS EASEMENT, GRANTED WITH THE FILING OF THIS PLAT
- 8.5' PRIVATE DRAINAGE EASEMENT BENEFITING PORTION OF LOT 23, BLOCK 31, AKA "TRACT B" OF SNOW HEIGHTS ADDITION, TO BE MAINTAINED BY THE OWNERS OF LOT 23-A, GRANTED WITH THE FILING OF THIS PLAT. SEE DRAINAGE NOTE 1 ON SHEET 3
- 17' PUBLIC DRAINAGE EASEMENT TO BE MAINTAINED BY THE OWNER OF LOT 23-A, GRANTED WITH THE FILING OF THIS PLAT. SEE DRAINAGE NOTE 1 ON SHEET 3

Legend

N 90°00'00" E	MEASURED BEARINGS AND DISTANCES
(N 90°00'00" E)	RECORD BEARINGS AND DISTANCES PER DEED (5/14/2014, DOC. NO. 2014038337)
(N 90°00'00" E)	RECORD BEARINGS AND DISTANCES PER DEED (6/2/1973, C9-75)
●	FOUND MONUMENT AS INDICATED
○	SET PK NAIL WITH TAG "LS 14271" UNLESS MARKED OTHERWISE
○ ^B	SET BATHEY MARKER WITH CAP "LS 14271"

ACS Monument "12_H21"
NAD 1983 CENTRAL ZONE
X=1557174.569 *
Y=1495088.04 *
Z=5514.433 * (NAVD 1988)
G-G=0.999648017
Mapping Angle=-0°09'36.29"

* U.S. SURVEY FOOT



2019C-35

CSI-CARTESIAN SURVEYS INC.

P.O. BOX 44414 RIO RANCHO, N.M. 87174
Phone (505) 896-3050 Fax (505) 891-0244

Sheet 2 of 3
180642

(2)

**Plat for
Lot 23-A, Block 31
Snow Heights Addition
Being Comprised of
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Heights Circle Right of Way
City of Albuquerque
Bernalillo County, New Mexico
March 2019**

Drainage Note 1

DRAINAGE FACILITIES AREAS MAINTAINED BY LOT OWNER IDENTIFIED AS [6] AND [7] AREAS DESIGNATED ON THE ACCOMPANYING PLAT AS "DRAINAGE EASEMENTS" ARE HEREBY DEDICATED BY THE OWNER AS A PERPETUAL EASEMENT FOR THE COMMON USE AND BENEFIT OF THE VARIOUS LOTS WITHIN THE SUBDIVISIONS FOR THE PURPOSE OF PERMITTING THE CONVEYANCE OF STORM WATER RUNOFF AND THE CONSTRUCTING AND MAINTAINING OF DRAINAGE FACILITIES IN ACCORDANCE WITH STANDARDS PRESCRIBED BY THE CITY OF ALBUQUERQUE. NO FENCE, WALL, PLANTING, BUILDING OR OTHER OBSTRUCTION MAY BE PLACED OR MAINTAINED IN EASEMENT AREA WITHOUT APPROVAL OF THE CITY ENGINEER OF THE CITY OF ALBUQUERQUE. THERE ALSO SHALL BE NO ALTERATION OF THE GRADES OR CONTOURS IN SAID EASEMENT AREA WITHOUT THE APPROVAL OF THE CITY ENGINEER. IT SHALL BE THE DUTY OF THE LOT OWNERS OF THIS SUBDIVISION TO MAINTAIN SAID DRAINAGE EASEMENT AND FACILITIES AT THEIR COST IN ACCORDANCE WITH STANDARDS PRESCRIBED BY THE CITY OF ALBUQUERQUE. THE CITY SHALL HAVE THE RIGHT TO ENTER PERIODICALLY TO INSPECT THE FACILITIES. IN THE EVENT SAID LOT OWNERS FAIL TO ADEQUATELY AND PROPERLY MAINTAIN DRAINAGE EASEMENT AND FACILITIES, AT ANY TIME FOLLOWING FIFTEEN (15) DAYS WRITTEN NOTICE TO SAID LOT OWNERS, THE CITY MAY ENTER UPON SAID AREA, PERFORM SAID MAINTENANCE, AND THE COST OF PERFORMING SAID MAINTENANCE SHALL BE PAID BY APPLICABLE LOT OWNERS PROPORTIONATELY ON THE BASIS OF LOT OWNERSHIP. IN THE EVENT LOT OWNERS FAIL TO PAY THE COST OF MAINTENANCE WITHIN THIRTY (30) DAYS AFTER DEMAND FOR PAYMENT MADE BY THE CITY, THE CITY MAY FILE A LIEN AGAINST ALL LOTS IN THE SUBDIVISION FOR WHICH PROPORTIONATE PAYMENT HAS NOT BEEN MADE. THE OBLIGATIONS IMPOSED HEREIN SHALL BE BINDING UPON THE OWNER, HIS HEIRS, AND ASSIGNS AND SHALL RUN WITH ALL LOTS WITHIN THIS SUBDIVISION.

THE GRANTOR AGREES TO DEFEND, INDEMNIFY, AND HOLD HARMLESS, THE CITY, ITS OFFICIALS, AGENTS AND EMPLOYEES FROM AND AGAINST ANY AND ALL CLAIMS, ACTIONS, SUITS, OR PROCEEDINGS OF ANY KIND BROUGHT AGAINST SAID PARTIES FOR OR ON ACCOUNT OF ANY MATTER ARISING FROM THE DRAINAGE FACILITY PROVIDED FOR HEREIN OR THE GRANTOR'S FAILURE TO CONSTRUCT, MAINTAIN, OR MODIFY SAID DRAINAGE FACILITY.

Public Utility Easements

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:

- A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.
- B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.
- C. Qwest Corporation d/b/a CenturyLink QC for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.
- D. Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.

Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer

In approving this plat, Public Service Company of New Mexico (PNM) and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

DOCH 2019031039

04/18/2019 09:26 AM Page: 3 of 3
PLAT R: \$25.00 B: 2019C P: 0035 Linda Stover, Bernalillo County

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Sheet 3 of 3
180642

2019C-35

(3)