

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

February 4, 2021

Matt Satches
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

**RE: PHS Hospice House
6000 Forest Hills Dr NE
Grading and Drainage Plan
Engineer's Stamp Date: 01/15/21
Hydrology File: E18D005C**

Dear Mr. Satches:

PO Box 1293

Based upon the information provided in your submittal received 01/19/2021, the Grading and Drainage Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103

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.

www.cabq.gov

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 11/2018)

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

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

TYPE OF SUBMITTAL: _____ 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) _____

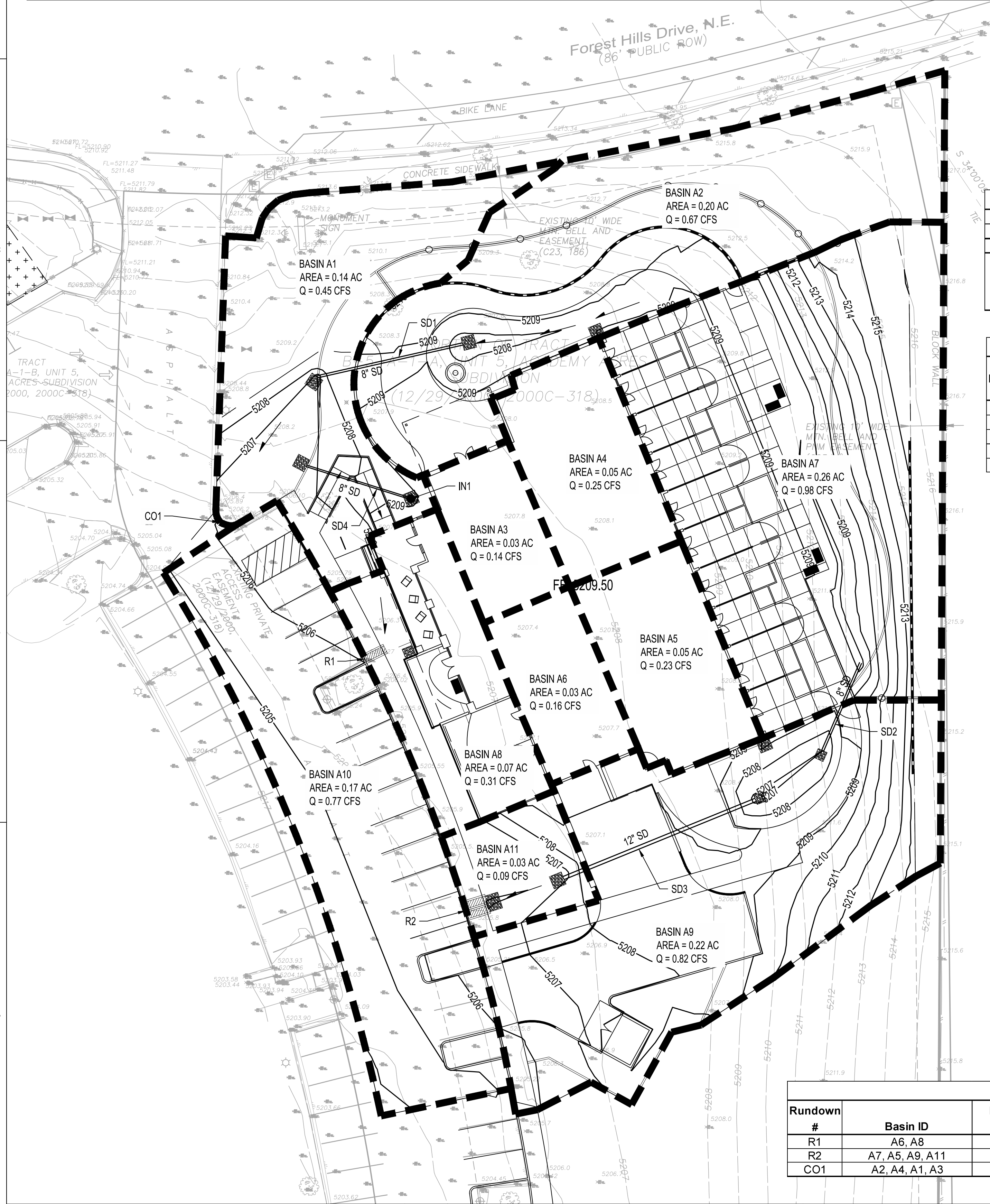
DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

PHS HOSPICE HOUSE														
Basin Data Table														
This table is based on the DPM Section 22.2, Zone: 3														
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V(100yr) (inches)	V _(100yr-6hr) (CF)	V _(100yr-24hr) (CF)	V _(100yr-10day) (CF)	Weighted Curve #	SW Quality (CF)
EXISTING														
A	55155	1.27	0.0%	86.4%	0.0%	13.6%	2.76	3.50	1.09	5025	5281	5281	82	N/A
TOTAL	55155	1.27	-	-	-	-	-	3.50	-	5025	5281	5281		0
PROPOSED														
A1	6025	0.14	0.0%	0.0%	95.0%	5.0%	3.24	0.45	1.16	585	595	595	87	11
A2	8818	0.20	0.0%	0.0%	90.0%	10.0%	3.30	0.67	1.24	910	941	941	87	31
A3	1340	0.03	0.0%	0.0%	0.0%	100.0%	4.49	0.14	2.58	288	334	334	98	47
A4	2382	0.05	0.0%	0.0%	0.0%	100.0%	4.49	0.25	2.58	512	594	594	98	83
A5	2280	0.05	0.0%	0.0%	0.0%	100.0%	4.49	0.23	2.58	490	568	568	98	80
A6	1509	0.03	0.0%	0.0%	0.0%	100.0%	4.49	0.16	2.58	324	376	376	98	53
A7	11158	0.26	0.0%	0.0%	50.0%	50.0%	3.83	0.98	1.84	1706	1897	1897	92	195
A8	3223	0.07	0.0%	0.0%	20.0%	80.0%	4.23	0.31	2.28	613	701	701	96	90
A9	9675	0.22	0.0%	0.0%	60.0%	40.0%	3.70	0.82	1.69	1359	1492	1492	91	135
A10	7459	0.17	0.0%	0.0%	0.0%	100.0%	4.49	0.77	2.58	1604	1859	1859	98	261
A11	1264	0.03	0.0%	0.0%	95.0%	5.0%	3.24	0.09	1.16	123	125	125	87	2
TOTAL	55134	1.27	-	-	-	-	-	4.87	-	8515	9480	9480		989



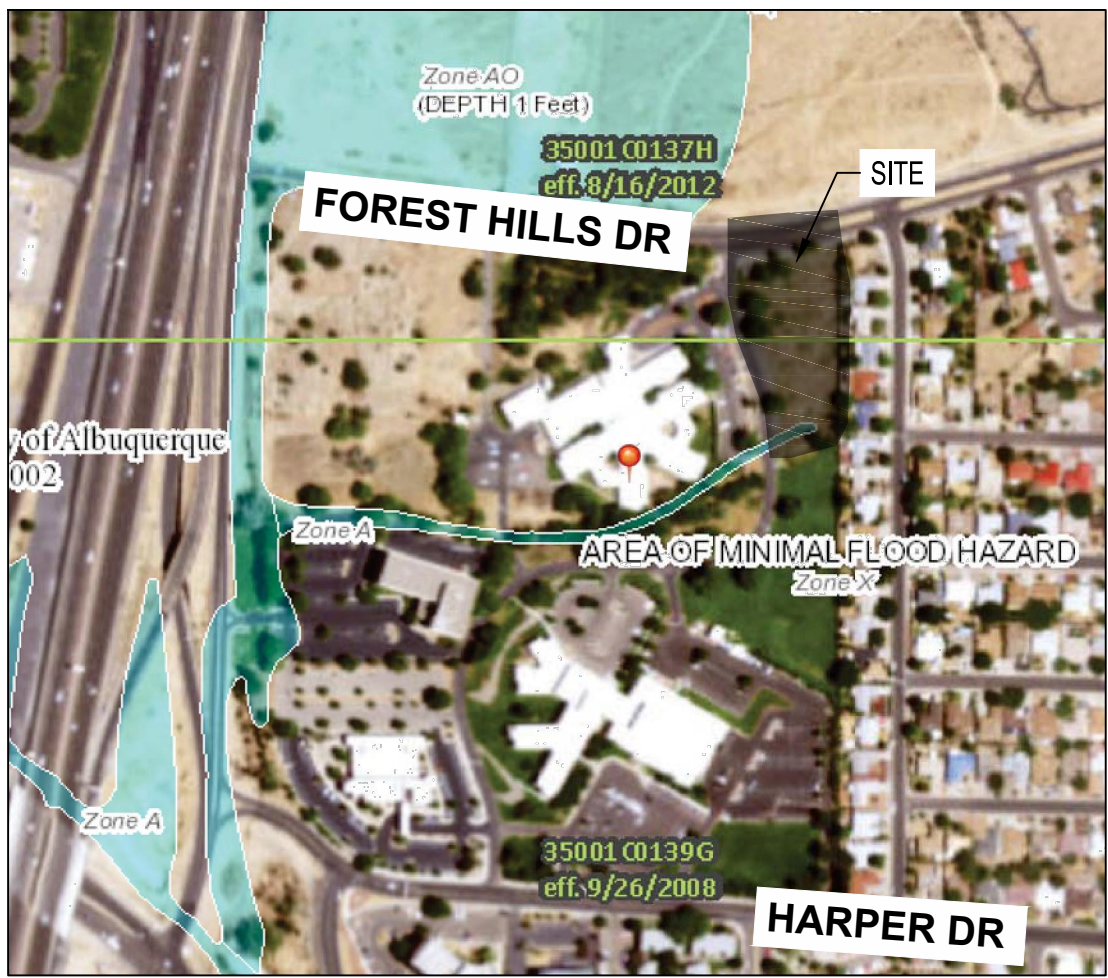
A.G.R.S. MONUMENT "SMW_12"
STANDARD C.O.A. ALUMINUM DISC
(FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES
(CENTRAL ZONE-N.A.D. 1983)
N=1,510,982.798 US SURVEY FEET
E=1,541,924.324 US SURVEY FEET
PUBLISHED EL=5242.356 US SURVEY FT (NAVD 1988)
GROUND TO GRID FACTOR=0.999664227
DELTA ALPHA ANGLE=-0°11'22.97"

INLET TABLE					
Inlet #	Inlet Type ²	Basin	Actual Flow (cfs)	Avail Head (ft)	Capacity ³ (cfs)
IN1	1 - 10" NYLOPLAST (DOME GRT)	A3	0.14	0.62	0.68
1. NYLOPLAST INLETS BASED ON MANUFACTURER NOMOGRAPHS					
2. INLETS PLACED IN SUMP CONDITION AND CAPACITIES BASED ON LESSER OF ORIFICE AND WIER EQUA					
3. INLETS INCLUDE 50% CLOGGING FACTOR					

STORM DRAIN PIPE TABLE					
PIPE #	INLET/SD/BASIN	Size in.	Slope	Capacity* cfs	ACTUAL FLOW cfs
SD1	BASIN A2 & A4	8	1.12%	1.28	0.91
SD2	BASIN A7	8	2.26%	1.82	0.98
SD3	SD2, BASIN A5 & A9	12	1.03%	3.62	2.04
SD4	IN1	8	1.28%	1.37	0.14
Capacity Based on Manning's Eq w/ N=0.013					



CONCRETE RUNDOWN TABLE									
Rundown #	Basin ID	Rundown Type	Actual Flow	Capacity Weir (CFS)	Weir Width ft	Channel Width ft	Channel Height ft	Minimum Slope	Capacity Mannings (CFS)
R1	A6, A8	Rectang	0.47	1.88	2.00	2.00	0.50	1.36%	6.41
R2	A7, A5, A9, A11	Rectang	2.13	7.50	4.00	4.00	0.50	1.76%	16.47
CO1	A2, A4, A1, A3	Rectang	1.50	1.88	2.00	2.00	0.50	N/A	N/A



VICINITY/FEMA MAP #35001CO139G

LEGEND	
---	LIMITS OF GRADING
---5025---	EXISTING INDEX CONTOUR
---5024---	EXISTING INTERMEDIATE CONTOUR
---5025---	PROPOSED INDEX CONTOUR
---5024---	PROPOSED INTERMEDIATE CONTOUR
---	MAJOR DRAINAGE BASIN
---	SUB BASIN

DRAINAGE NARRATIVE

INTRODUCTION:
THE PHS HOSPICE HOUSE IS LOCATED SOUTH OF FOREST HILLS DRIVE AND EAST OF THE EXISTING GENESIS CARE BUILDING. THE SITE IS CURRENTLY DEVELOPED. THE LOCATION OF THE NEW HOSPICE HOUSE IS ON THE NORTHEAST CORNER OF THE EXISTING TRACT. CURRENTLY THIS PORTION OF THE SITE IS UNDEVELOPED.

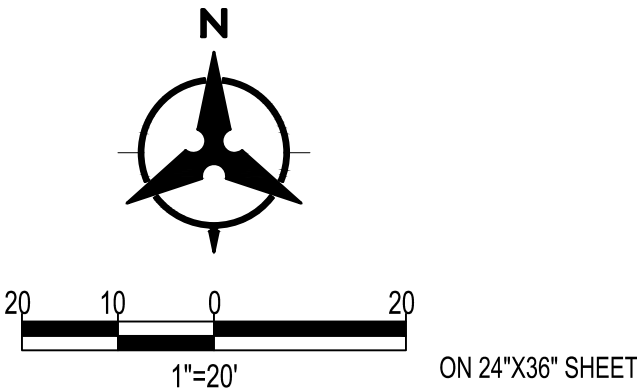
EXISTING CONDITIONS:
THE EXISTING SITE SLOPES EAST TO WEST TOWARDS THE EXISTING PARKING LOT AT A SLOPE OF APPROXIMATELY 5%. THE SITE SHEET FLOWS INTO THE EXISTING PARKING LOT WHERE IT IS PICKED UP BY VARIOUS CURB CUTS. RUNOFF IS THEN CONVEYED INTO AN EXISTING ARROYO SOUTH OF THE EXISTING GENESIS BUILDING. THIS ARROYO ALSO CONVEYS RUNOFF FROM THE NEIGHBORHOOD TO THE EAST. THE ULTIMATE OUTFALL LOCATION FOR THIS RUNOFF IS AN EXISTING POND LOCATED ON THE WESTERN PORTION OF THE TRACT, EAST OF THE FRONTAGE ROAD. APPROXIMATELY 3.50 CFS IS DISCHARGED INTO THE PARKING LOT FROM THIS PORTION OF THE SITE.

NO HYDROLOGY FILE OR DRAINAGE MASTER PLANS COULD BE FOUND DETAILING THE HYDROLOGY FOR THE EXISTING POND. THE ESTIMATED CONTRIBUTING BASIN FROM TRACTS B-5-A-1-A AND B-5-A-1-B TO THE EXISTING WESTERN POND IS APPROXIMATELY 15 ACRES. THE TOTAL RUNOFF FROM THIS BASIN IS APPROXIMATELY 45.0 CFS. LAND TREATMENT PERCENTAGES WERE BASED ON GOOGLE EARTH IMAGERY. THE TOTAL BASIN AREA WAS BASED ON USGS QUADRANGLE MAPS AND EXISTING HYDROLOGY FILES (E18D015).

PROPOSED CONDITIONS:
THE PROPOSED CONDITIONS WILL MIMIC EXISTING CONDITIONS. THE PROPOSED SITE WILL HAVE THREE MAIN DISCHARGE LOCATIONS INTO THE EXISTING PARKING LOT. THE NORTHERN OUTFALL WILL BE THROUGH A NEW CURB OPENING. THE MIDDLE OUTFALL WILL BE THROUGH A NEW SIDEWALK CULVERT. THE SOUTHERN OUTFALL WILL BE THROUGH A NEW SIDEWALK CULVERT. ULTIMATELY THIS RUNOFF WILL CONTINUE SHEET FLOWING THROUGH THE PARKING LOT TO THE WEST SIMILAR TO EXISTING CONDITIONS. RUNOFF WILL THEN DISCHARGE INTO THE EXISTING POND WEST OF THE EXISTING BUILDING. THE PROPOSED RUNOFF FLOW RATE IS 4.87 CFS. THIS IS AN INCREASE OF 1.37 CFS FROM EXISTING CONDITIONS. THE 1.37 CFS INCREASES THE EXISTING FLOWRATE FROM 45.0 CFS TO 46.37 CFS, REPRESENTING AN INCREASE OF ~3.0% WHICH IS CONSIDERED NEGLIGIBLE.

NO ONSITE WATER HARVESTING IS PLANNED. THE EXISTING POND WEST OF THE SITE HAS A LEVEL OF RETENTION IN EXISTING CONDITIONS. THE REQUIRED STORM WATER QUALITY VOLUME IS APPROXIMATELY 989 CF.

CONCLUSION:
BASED ON THE INFORMATION PROVIDED ABOVE, THE EXISTING POND WAS INTENDED TO BE SIZED FOR THE EXISTING SITE AND EXISTING RUNOFF FROM THE NEIGHBORHOODS TO THE EAST. THE INCREASE IN RUNOFF DUE TO THE HOSPICE HOUSE IS NEGLIGIBLE IN COMPARISON TO THE EXISTING SITE AS A WHOLE AND THE LARGE AMOUNT OF RUNOFF FROM THE EASTERN NEIGHBORHOODS. THEREFORE WE ARE IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST BUILDING PERMIT APPROVAL.



Bohannon & Huston
www.bhinc.com 800.877.5332

**DEKKER
PERICH
SABATINI**

ARCHITECTURE
DESIGN
INSPIRATION

ARCHITECT

ENGINEER

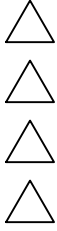


PROJECT

PHS HOSPICE HOUSE
6000 FOREST HILLS DR. NE
ALBUQUERQUE, NM

ISSUED FOR
PERMITTING/
CONSTRUCTION

REVISIONS



DRAWN BY	BF
REVIEWED BY	MS
DATE	01/15/2021
PROJECT NO.	20-0023
DRAWING NAME	

DRAINAGE
MANAGEMENT
PLAN

SHEET NO.

C-001

OF