CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



Mayor Timothy M. Keller

January 17, 2020

Amit Pathak, PE Bohannan Huston, Inc. 7500 Jefferson St NE Albuquerque, NM 87109

RE: Hope Works Hope Village 1215 3rd St. NW Grading and Drainage Plan Stamp Date: 1/16/20 Hydrology File: J14D194

Dear Mr. Pathak,

PO Box 1293 Based on the submittal received on 1/16/20, the above-referenced grading and drainage plan is approved for Plat.

Prior to Grading/Building Permit (for Information):

- Albuquerque 1. Remove any "Conceptual" markings.
 - 2. Include project benchmark and datum; all existing survey, proposed grades, and benchmarks must be provided in NAVD 88.
 - 3. Since the site is extremely flat, please provide existing and proposed spot elevations in enough density to verify the drainage areas and outfalls that you have indicated.

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NM 87103

- 4. 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.
- 5. Add note on the plan that "No work shall be performed in the public ROW without an approved Work Order or Excavation Permit."
- 6. An SO-19 Permit will be required and should be included on the request. Please include the <u>standard SO-19</u> notes on the grading plan.
- 7. The stormwater quality ponds need to be sized for the areas draining to them. Ponds WH-D2 and WH-E1 are undersized; if they cannot be upsized to meet the SWQV, then Fee-in-Lieu will be required for the bypass volume.

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8. 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):

- 9. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Subdivision* is required.
- 10. A Bernalillo County Recorded <u>Drainage Covenant (No Public Easement)</u> is required for the stormwater control ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.
- PO Box 1293 11. The sidewalk culverts must be inspected and approved by Storm Drain Maintenance (Augie Armijo at (505) 857-8607).

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

Albuquerque

Sincerely,

NM 87103

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Dana M. Peterson Senior Engineer, Planning Dept. Development Review Services



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Hope Works Hope Village	Building Permit #:	Hydrology File #: J14-D194
DRB#: PR-2019-003003	EPC#:	Work Order#:
Legal Description: Lots 3A - 7A Block 6 Paris	s Addition	
City Address: 1215 3rd St.		
Applicant: HopeWorks		Contact:
Address: PO Box 27256, Albuquerque, Nivi, 67126)	
Phone#:1	Fax#:	E-mail:
Other Contact: Bohannan Huston		Contact: Racquel Michel
Address: 7500 Jefferson St. NE, Albuquerque, NM,	87109	
Phone#: 505-823-1000	Fax#:	E-mail: rmichel@bhinc.com
TYPE OF DEVELOPMENT: VPLAT	RESIDENCE	DRB SITE ADMIN SITE
Check all that Apply:		
DEPARTMENT:	TYPE OF	APPROVAL/ACCEPTANCE SOUGHT: DING PERMIT APPROVAL TIFICATE OF OCCUPANCY
TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT AF ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC IMPACT STUDY (TIS) TRAFFIC IMPACT STUDY (TIS) TRET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING? IS THIS A RESUBMITTAL?: Mo <td>PPLIC PPLIC PPLIC PPLIC Image: SIA/ Image: SIA/<td>IMINARY PLAT APPROVAL PLAN FOR SUB'D APPROVAL PLAN FOR BLDG. PERMIT APPROVAL L PLAT APPROVAL RELEASE OF FINANCIAL GUARANTEE NDATION PERMIT APPROVAL DING PERMIT APPROVAL 9 APPROVAL NG PERMIT APPROVAL DING/ PAD CERTIFICATION K ORDER APPROVAL MR/LOMR DDPLAIN DEVELOPMENT PERMIT ER (SPECIFY)</td></td>	PPLIC PPLIC PPLIC PPLIC Image: SIA/ <td>IMINARY PLAT APPROVAL PLAN FOR SUB'D APPROVAL PLAN FOR BLDG. PERMIT APPROVAL L PLAT APPROVAL RELEASE OF FINANCIAL GUARANTEE NDATION PERMIT APPROVAL DING PERMIT APPROVAL 9 APPROVAL NG PERMIT APPROVAL DING/ PAD CERTIFICATION K ORDER APPROVAL MR/LOMR DDPLAIN DEVELOPMENT PERMIT ER (SPECIFY)</td>	IMINARY PLAT APPROVAL PLAN FOR SUB'D APPROVAL PLAN FOR BLDG. PERMIT APPROVAL L PLAT APPROVAL RELEASE OF FINANCIAL GUARANTEE NDATION PERMIT APPROVAL DING PERMIT APPROVAL 9 APPROVAL NG PERMIT APPROVAL DING/ PAD CERTIFICATION K ORDER APPROVAL MR/LOMR DDPLAIN DEVELOPMENT PERMIT ER (SPECIFY)
COA STAFF:	ELECTRONIC SUBMITTAL REC	EIVED:

FEE PAID:_____

Bohannan 🛦 Huston

7500 Jefferson St. NE Albuquerque, NM 87109-4335

www.bhinc.com

voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332

January 16, 2020

Dana M. Peterson Planning Department City of Albuquerque PO Box 1293 Albuquerque, NM 87103

RE: Hope Works Hope Village 1215 3rd St. NW Hydrology File: J14-D194

Dear Mr. Peterson,

Thank you for the recent review of our grading and drainage submittal. This letter and attached plan are in a response to the comments provided on 1/9/20. The comments that were not addressed or addressed in a different method as requested, are explained below.

- 1. There will not be an infrastructure list, so we added a note to the trench drains in the public right of way.
- 2. A portion of the FIRM panel was added to the DMP.
- 3. Pond labels have been added to the grading plan. To ensure readability the requested information was included as a table on the grading plan.
- 4. The narrative was revised to remove a typo and clarify that the storm water quality volume will be retained and infiltrated however the 100 year volume will be detained and then overflow mostly to 4th St. The existing conditions have been added as well.
- 5. Included in the re-submittal is the weir calculation reports for a curb cut and sidewalk culvert. We modified one curbcut to be 24" wide to ensure capacity was met.
- Included in the re-submittal is an exhibit with cross sections at the property lines. There are no retaining walls along any of the property lines and we are matching to existing grades along the perimeter.
- 7. We are seeking plat approval only and conceptual note has been added to the plan.

Please contact me if you have any questions at <u>michel@bhinc.com</u> or 823-1000.

Sincerely. rogen Mill

Racquel M. Michel, P.E. Project Engineer Community Development & Planning

Engineering **A**

Spatial Data A

Advanced Technologies

Weir Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Thursday, Jan 16 2020

12in. Curb Cut

Trapezoidal Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.50
Bottom Length (ft)	= 1.00	Q (cfs)	= 1.375
Total Depth (ft)	= 0.50	Area (sqft)	= 0.78
Side Slope (z:1)	= 1.10	Velocity (ft/s)	= 1.77
		Top Width (ft)	= 2.10
Calculations			
Weir Coeff. Cw	= 2.70		
Compute by:	Q vs Depth		
No. Increments	= 10		



Weir Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Thursday, Jan 16 2020

24in. Curb Cut

	Highlighted	
= Sharp	Depth (ft)	= 0.50
= 2.00	Q (cfs)	= 2.329
= 0.50	Area (sqft)	= 1.28
= 1.10	Velocity (ft/s)	= 1.83
	Top Width (ft)	= 3.10
= 2.70		
Q vs Depth		
= 10		
	 Sharp 2.00 0.50 1.10 2.70 Q vs Depth 10 	Highlighted= SharpDepth (ft)= 2.00Q (cfs)= 0.50Area (sqft)= 1.10Velocity (ft/s)Top Width (ft)= 2.70Q vs Depth= 10



Weir Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Sidewalk Culvert

Rectangular Weir		Highlighted	
Crest	= Sharp	Depth (ft)	= 0.50
Bottom Length (ft)	= 1.00	Q (cfs)	= 0.955
Total Depth (ft)	= 0.50	Area (sqft)	= 0.50
		Velocity (ft/s)	= 1.91
Calculations		Top Width (ft)	= 1.00
Weir Coeff. Cw	= 2.70		
Compute by:	Q vs Depth		
No. Increments	= 10		





SUMMER AVENUE



Water Harvesting	SWQV	SWQV	V (100yr-6hr)	V (100yr-6hr)
Area	(CF)	Elevation	(CF)	Elevation
WH-A	73	4958.2	795.1	4958.6
WH-B	82	4959.2	853.9	4960.0
WH-C	48	4957.3	574.1	4959.3
WH-D1	350	4957.5	3240.2	4959.3
WH-D2	350	4959.5	912.2	4959.5
WH-E1	287	4958.5	2582.4	4958.5
WH-E2	309	4958.7	2759.7	4959.1



NTS

GRADING NOTES

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.

2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.

3. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.

4. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.

5. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.

6. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY AND PERMANENT SURFACE EROSION CONTROL MEASURES FOR ALL DISTURBED AREAS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

7. ALL PROPOSED SPOT ELEVATIONS AND CONTOURS REFLECT FINISHED GRADE OF TOP OF PAVEMENT AND FINISHED LANDSCAPING ELEVATIONS.

8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1 ' FROM PLAN ELEVATIONS. FINISHED FLOOR ELEVATIONS SHALL BE +/- 0.05' FROM PLAN ELEVATION.

9. NO WORK SHALL BE PERFORMED IN THE PUBLIC RIGHT OF WAY WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT.

GRADING KEYED NOTES

- 1. INSTALL 12" CONCRETE CURB OPENING PER DETAIL 1.
- 2. MATCH EXISTING ELEVATION.
- 3. INSTALL 14' WIDE RIP-RAP SWALE PER DETAIL 2.
- 4. INSTALL 12" SIDEWALK CULVERT PER COA STD DWG 2236.
- 5. REMOVE EXISTING DRIVE PAD AND REPLACE WITH SIDEWALK, CURB, AND GUTTER PER COA STD. DETAILS 2415 & 2430.
- 6. INSTALL CURB ACCESS RAMP PER COA STD. DETAIL 2426
- INSTALL 12" SIDEWALK CULVERT PER COA STD DWG 2236. SO-19 7 PERMIT MUST BE OBTAINED.
- 8. INSTALL 24" CONCRETE CURB OPENING PER DETAIL 1.

PROPERTY LINE

PROPOSED BUILDING FOOTPRINT

LIMITS OF GRADING

EXISTING EASEMENT

EXISTING INDEX CONTOUR

EXISTING INTERMEDIATE CONTOUR

EXISTING GROUND SPOT ELEVATION

PROPOSED INDEX CONTOUR

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

DIRECTION OF FLOW

WATER BLOCK/GRADE BREAK

PROPOSED STORM DRAIN LINE

PROPOSED STORM DRAIN MANHOLE

PROPOSED STORM DRAIN INLETS

PROPOSED STORM DRAIN CAP



CONCEPTUAL -**NOT FOR CONSTRUCTION**





DESCRIPTION
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JOB NUM	IBER	18–	-13
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PROJECT	MGR	R	AP
DATE	1	2-31-20	019
PHASE	DRB	SUBMITT	AL

PROJECT	
Hope Works Hope 1215 Third Street NW Albuquerque, NM 87102	Village
ПТЕ	
GRADING PLAN	

C100

SHEET



DRAINAGE MANAGEMENT PLAN

The purpose of this submittal is to present a drainage and grading plan for the proposed Hope Works - Hope Village Site. The site will consist of a 3-story building including 42 residential units, along with the associated parking, landscaping, and site amenities. The development is located between 3rd and 4th St and between Summer and Mountain. Per FEMA community map panel #35001C0332G, the site is not located within a floodplain (see below). The site is in rainfall zone 2 as defined by figure A-1 of the DPM section 22. This grading and drainage plan is submitted in support of Preliminary/Final Plat.

The site is currently developed with buildings (which will be demolished), paved and unpaved parking areas and a cell tower (which will remain), See Existing conditions table. The Storm Water Quality Volume (SWQV) per DPM 6-11 is retained in multiple water harvesting areas throughout the site. The 100-year, 6-hour storm is detained in water harvesting areas and then drains to 3rd and 4th St. The runoff volumes are analyzed using Equation A-9 from the DPM, Section 22.2. Land treatments are based on the proposed uses which include a building, courtyard, parking lot, irrigated landscaping, and water harvesting ponds. The land treatments, volume calculations for the contributing basins, and pond volume calculations are shown in a table format on this sheet.

Basin P1 will drain to water harvesting pond A and overflow to 3rd St. The roof drains of the northern leg of the building (Basin P4) will be directed to the north. Basins P3 and P4 will collect in a water harvesting area along the north property line and drain to 3rd. St. The long building leg (Basin P2) will have roof drains that will be directed to the west. Drainage from basin P2 and basin P6 will be detained in water harvesting areas D1 and D2 and then overflow to 4th St. Basin P5 will drain to water harvesting pond C and then overflow to 4th St. Basin P7 will drain to water harvesting pond E1, Basin P8 will drain to water harvesting pond E2, and then they will overflow to 4th St.

This drainage submittal has been prepared in accordance with City of Albuquerque requirements. This plan demonstrates the proposed grading and drainage concepts. The implementation of these concepts would result in the safe detention of the 100-year, 6-hour storm event. With this submittal we request Hydrology Development approval of this Grading and Drainage Plan for Preliminary/Final Plat.

Existing Conditions Basin Data Table										
This table is based on the DPM Section 22.2, Zone: 2										
Area	Area	Lane	Land Treatment Percentages Q(100yr) Q(100yr-6hr) WT E V(100yr-6hr) V(100yr-10						V (100yr-10day)	
(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	CF
54048	1.24	0.0%	0.0%	96.6%	3.4%	3.19	3.96	1.16	5242	5488
	is based on Area (SQ. FT) 54048	is based on the DPM Se Area Area (SQ. FT) (AC.) 54048 1.24	Extended is based on the DPM Section 22.2, Z Area Area Land (SQ. FT) (AC.) A 54048 1.24 0.0%	Existing Conis based on the DPM Section 22.2, Zone:AreaAreaLand Treatment(SQ. FT)(AC.)AB540481.240.0%0.0%	Existing Conditionsis based on the DPM Section 22.2, Zone:2AreaLand Treatment Percent(SQ. FT)(AC.)ABC540481.240.0%0.0%96.6%	Existing Conditions Basin Dateis based on the DPM Section 22.2, Zone:2AreaAreaLand Treatment Percentages(SQ. FT)(AC.)ABC540481.240.0%0.0%96.6%3.4%	Existing Conditions Basin Data Table is based on the DPM Section 22.2, Zone: 2 Area Area Land Treatment Percentages Q(100yr) (SQ. FT) (AC.) A B C D (cfs/ac.) 54048 1.24 0.0% 0.0% 96.6% 3.4% 3.19	Existing Conditions Basin Data Tableis based on the DPM Section 22.2, Zone:2AreaAreaLand Treatment PercentagesQ(100yr)Q(100yr-6hr)(SQ. FT)(AC.)ABCD(cfs/ac.)(CFS)540481.240.0%0.0%96.6%3.4%3.193.96	Existing Conditions Basin Data Tableis based on the DPM Section 22.2, Zone: 2AreaAreaLand Treatment PercentagesQ(100yr)Q(100yr-6hr)WT E(SQ. FT)(AC.)ABCD(cfs/ac.)(CFS)(inches)540481.240.0%0.0%96.6%3.4%3.193.961.16	Existing Conditions Basin Data Table is based on the DPM Section 22.2, Zone: 2 Area Area Land Treatment Percentages Q(100yr) Q(100yr-6hr) WT E V(100yr-6hr) (SQ. FT) (AC.) A B C D (cfs/ac.) (CFS) (inches) (CF) 54048 1.24 0.0% 0.0% 96.6% 3.4% 3.19 3.96 1.16 5242

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	Proposed Conditions Basin Data Table										
This	table is based	on the DPM S	Section 22.2, 2	Zone:	2						
Basin	Area	Area	Lar	nd Treatme	nt Percenta	iges	Q (100yr)	Q(100yr-6hr)	WT E	V (100yr-6hr)	V(100yr-10day)
ID	(SQ. FT)	(AC.)	A	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	CF
P1	5504.79	0.13	0.0%	0.0%	39.1%	60.9%	4.09	0.52	1.73	795	1242
P2	8668.68	0.20	0.0%	0.0%	0.0%	100.0%	4.70	0.94	2.12	1531	2687
P3	1991.64	0.05	0.0%	0.0%	100.0%	0.0%	3.14	0.14	1.13	188	188
P4	3771.77	0.09	0.0%	0.0%	0.0%	100.0%	4.70	0.41	2.12	666	1169
P5	4159.48	0.10	0.0%	0.0%	46.9%	53.1%	3.97	0.38	1.66	574	869
P6	11576.01	0.27	0.0%	0.0%	35.2%	64.8%	4.15	1.10	1.77	1709	2709
P7	15800.37	0.36	0.0%	0.0%	16.0%	84.0%	4.45	1.61	1.96	2582	4351
P8	2575.27	0.06	0.0%	0.0%	61.4%	38.6%	3.74	0.22	1.51	325	457
Total	54048.00	1.18						5.32	14.00	8370	13673

Basin	Impervious Area (SF)	SWQ Volume (CF)*
P1	3354.90	72.69
P2	8668.68	187.82
P3	0.00	0.00
P4	3771.77	81.72
P5	2210.75	47.90
P6	7499.04	162.48
P7	13267.23	287.46
P8	995.06	21.56
Total	38772.38	840.07
* Lleing 0 26 in ne	r DPM (6-11) for	re-development site

Water Harvesting	Contributing	SWQV	Volume Provided
Area	Basins	(CF)	(CF)
WH-A	P1	73	236
WH-B	P3 + P4	82	409
WH-C	P5	48	525
WH-D1	P2 + P6	350	2328
WH-D2	P2 + P6	350	295
WH-E1	P7	287	147
WH-E2	P7 + P8	309	481
Total		1499	4697

20200060 Hope Works Project

20200060 Hope Works Project

Using 0.26 in. per DPIVI (6-11) for re-development site.





BY DESCRIPTION	
REV DATE	2 2 2
	mullen heller
MULLEN ARCHITE 1718 CENTRA STE ALBUQUERO 871 P 505 F 505. www.mullen JOB NUMBER DRAWN BY PROJECT MGF DATE 1 PHASE DRB	HELLER ECTURE L AVE SW . D QUE, NM 09 .268.4144 .268.4244 .heller.com 18–13 RMM R AP 2–31–2019 SUBMITTAL
/ Hope Village 102	NAGEMENT PLAN



Bohannan 🛦 Huston

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