CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

June 15, 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
Engineer's Stamp Date: 06/11/20
Hydrology File: J14D194

Dear Mr. Pathak:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 06/12/2020, the Grading & Drainage Plan is approved for Building Permit, SO-19 Permit.

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.

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.

Also as a reminder, please provide Drainage Covenant for the stormwater quality ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A $25 fee will be required.

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

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 Addition

City Address: 1215 3rd St.

Applicant: HopeWorks Contact: _____

Address: PO Box 27258, Albuquerque, NM, 87125

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

Other Contact: Bohannan Huston Contact: Kelly Klein

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

Phone#: 505-823-1000 / 505-318-7815 Fax#: _____ E-mail: kklein@bhinc.com

TYPE OF DEVELOPMENT: ☑ PLAT ☐ RESIDENCE ☐ DRB SITE ☐ ADMIN SITE

Check all that Apply:

DEPARTMENT:

☑ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION

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?

IS THIS A RESUBMITTAL?: ☐ Yes ☑ No

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: 06/11/2020 By: Kelly Klein

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Bohannan Huston

60 est. 1959 years of service

7500 Jefferson Street NE
Albuquerque, NM 87109
www.bhinc.com
p. 505.823.1000

June 11, 2020

Renee Brissette, PE
Hydrology Department
City of Albuquerque
600 2nd St. NE
Albuquerque, NM, 87102

RE: Hydrology Submittal for Building Permit Approval – Hope Works Hope Village
Hydrology File: J14-D194

Dear Ms. Brissette,

Submitted to Hydrology for Building Permit and SO-19 Approval is the Grading Plan and Drainage Management Plan for Hope Works Hope Village.

Enclosed is the following information:

- Drainage Information Sheet
- Grading Plan
- Drainage Management Plan

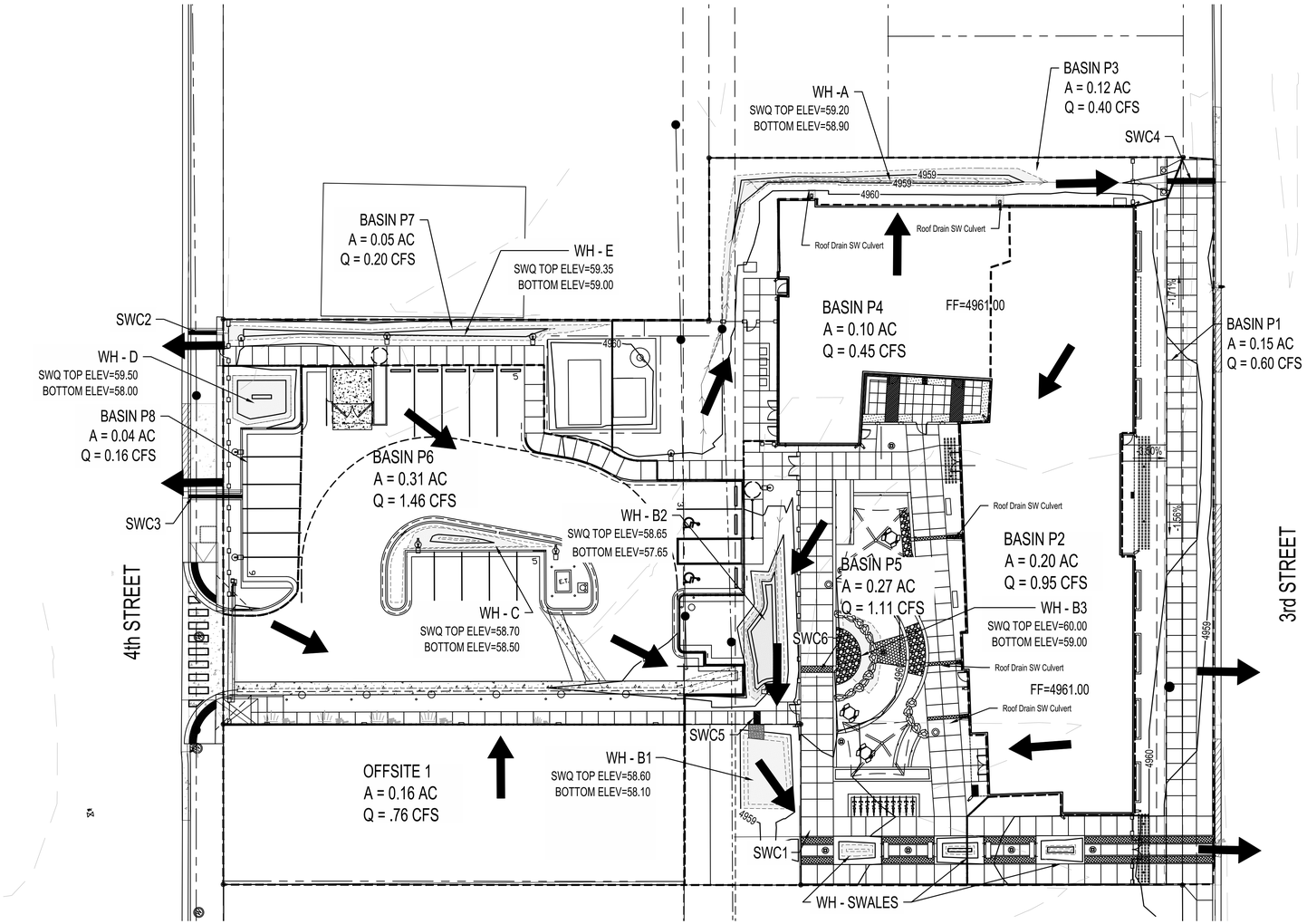
We are seeking approval of the above mentioned plans for Building Permit and S0-19 Approval. If you have any questions, or require further information, please call me or Amit Pathak at 823-1000.

Sincerely,

Kelly M. Klein

Kelly Klein, P.E.
Project Manager
Community Development and Planning

KMK/kmk
Enclosures



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 existing site is is extremely flat with only 1' drop between 4th Street and 3rd Street. Existing survey and observation indicate that ponding currently occurs onsite, but runoff also enters both 3rd Street and 4th Street. 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 100-year, 6-hour storm is routed through 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.

The proposed roof drains of the northern leg of the building (Basin P4) will be directed and collected in the water harvesting pond WH-A along the north property line before draining to 3rd. St. The long building leg (Basin P2) will have roof drains that will be directed to the west. Drainage from basin P2, P5, P6 & OFF1 will be detained in a series of water harvesting ponds, WH-B1, WH-B2, WH-B3 and then be directed to 3rd Street through 2 x 2' wide sidewalk culverts. Basin P8 partially contributes to the water harvesting pond WH-D, and then it will overflow to 4th St. Basin P7 drains through water harvesting pond WH-E and eventually outfalls into 4th street.

The Storm Water Quality Volume (SWQV) per DPM 6-11 is retained in multiple water harvesting areas throughout the site as described above. The required storm water quality is 1008 cf (based on a runoff depth of 0.26" as required for sites in re-redevelopment areas). The total available storm water quality volume retained on site is 965 cf. "Payment in lieu" will be made to account for the remaining volume.

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.

20200060 Hope Works Project

Existing Conditions Basin Data Table

This table is based on the DPM Section 22.2, Zone: 2

Basin	Area	Area	Land Treatment Percentages				$Q_{(100yr)}$	$Q_{(100yr-6hr)}$	WT E	$V_{(100yr-6hr)}$	$V_{(100yr-10day)}$
ID	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	CF
Basin 1	54048	1.24	0.0%	0.0%	96.6%	3.4%	3.19	*3.96*	*1.16*	*5242*	*5488*

20200060 Hope Works Project

Proposed Conditions Basin Data Table

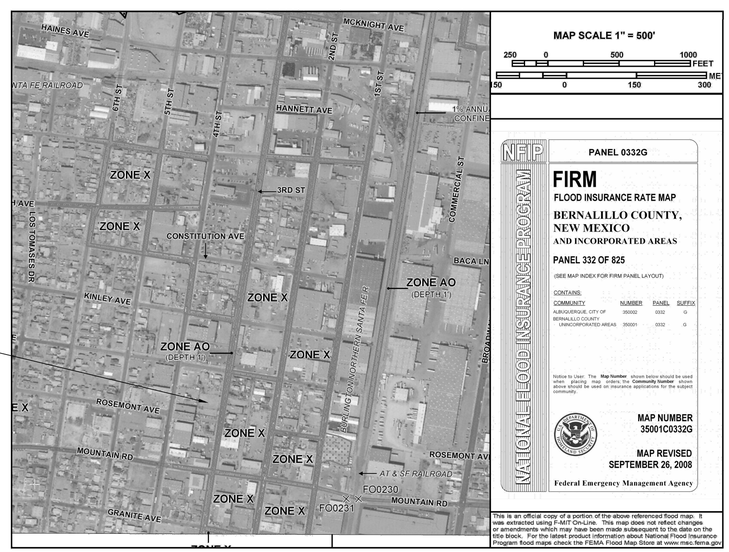
This table is based on the DPM Section 22.2, Zone: 2

Basin	Area	Area	Land Treatment Percentages				$Q_{(100yr)}$	$Q_{(100yr-6hr)}$	WT E	$V_{(100yr-6hr)}$	$V_{(100yr-10day)}$
ID	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	CF
P1	6668.01	0.15	0.0%	0.0%	49.7%	50.3%	3.92	*0.60*	*1.63*	*905*	*1352*
P2	8827.20	0.20	0.0%	0.0%	0.0%	100.0%	4.70	*0.95*	*2.12*	*1559*	*2736*
P3	5154.89	0.12	0.0%	0.0%	82.2%	17.8%	3.42	*0.40*	*1.31*	*561*	*683*
P4	4147.51	0.10	0.0%	0.0%	0.0%	100.0%	4.70	*0.45*	*2.12*	*733*	*1286*
P5	11632.38	0.27	0.0%	0.0%	35.5%	64.5%	4.15	*1.11*	*1.77*	*1714*	*2714*
P6	13615.33	0.31	0.0%	0.0%	8.1%	91.9%	4.57	*1.43*	*2.04*	*2314*	*3983*
P7	2183.04	0.05	0.0%	0.0%	42.6%	57.4%	4.04	*0.20*	*1.70*	*309*	*476*
P8	1798.39	0.04	0.0%	0.0%	46.6%	53.4%	3.97	*0.16*	*1.66*	*249*	*377*
OFF1	7047.74	0.16	0.0%	0.0%	0.0%	100.0%	4.70	*0.76*	*2.12*	*1245*	*2185*
Total	**61074.49**	**1.40**						**6.07**	**17.59**	**9589**	**15791**

Side Walk Culvert Summary Table

Culvert #		Q (actual)	Depth (weir opening height)	Total	Minimum	Q(max) Mannings*	Q(max) Weir**
#	Basin ID	(cfs)	(ft)	Width ft	Slope	(cfs)	(cfs)
SWC1	P2, P5, P6 & OFF1	4.25	0.67	4.00	0.50%	13.72	5.81
SWC2	P7	0.20	0.50	1.00	0.50%	1.61	0.94
SWC3	P8	0.16	0.50	1.00	0.50%	1.61	0.94
SWC4	P3, P4	0.85	0.50	1.00	0.50%	1.61	0.94
SWC5	UPSTREAM	3.88	0.67	3.00	0.50%	9.75	4.36
SWC6	P2, P5	2.06	0.50	3.00	0.50%	3.22	2.81
Roof Drain SW Culverts***	-	0.45	0.50	1.00	0.50%		0.94

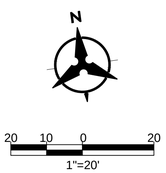
* Based on Mannings Equation where n=0.013
** Based on Weir Eq: Q=CL(h^1.5) where C=2.65
*** Q(actual) based on largest flow from a Roof Drain



Basin	Impervious Area (SF)	Required SWQ Volume (CF)*
P1	3354.90	72.7
P2	8827.20	191.3
P3	915.00	19.8
P4	4147.51	89.9
P5	0.00	0.0
P6	7499.04	162.5
P7	12512.33	271.1
P8	1253.04	27.1
P9	960.27	20.8
OFF1	7047.74	152.7
Total	46517.03	1007.9

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

Water Harvesting Area	Contributing Basins	Required SWQV (CF)	Volume Provided (CF)
-	P1	73	0
WH-A	P3 + P4	110	95
-	P5	0	0
WH-B1	(UPSTREAM PONDS), PART-P5	54	138
WH-B2	PART-P5, PART-P6 & OFFSITE	342	269
WH-B3	P2 & PART-P5	245	105
WH-C	PART-P6	136	34
WH-D	P8	21	199
WH-E	P7	27	97
WH-SWALES	UPSTREAM	-	28
Total		1008	965



Bohannan Huston
www.bhinc.com 800.877.5332

REV | DATE | BY | DESCRIPTION

mullen heller architecture

AMIT PATHAK NEW MEXICO 24882 REGISTERED PROFESSIONAL ENGINEER 06.11.2020

MULLEN HELLER ARCHITECTURE
1718 CENTRAL AVE SW | STE. D
ALBUQUERQUE, NM | 87109
P | 505.268.4144
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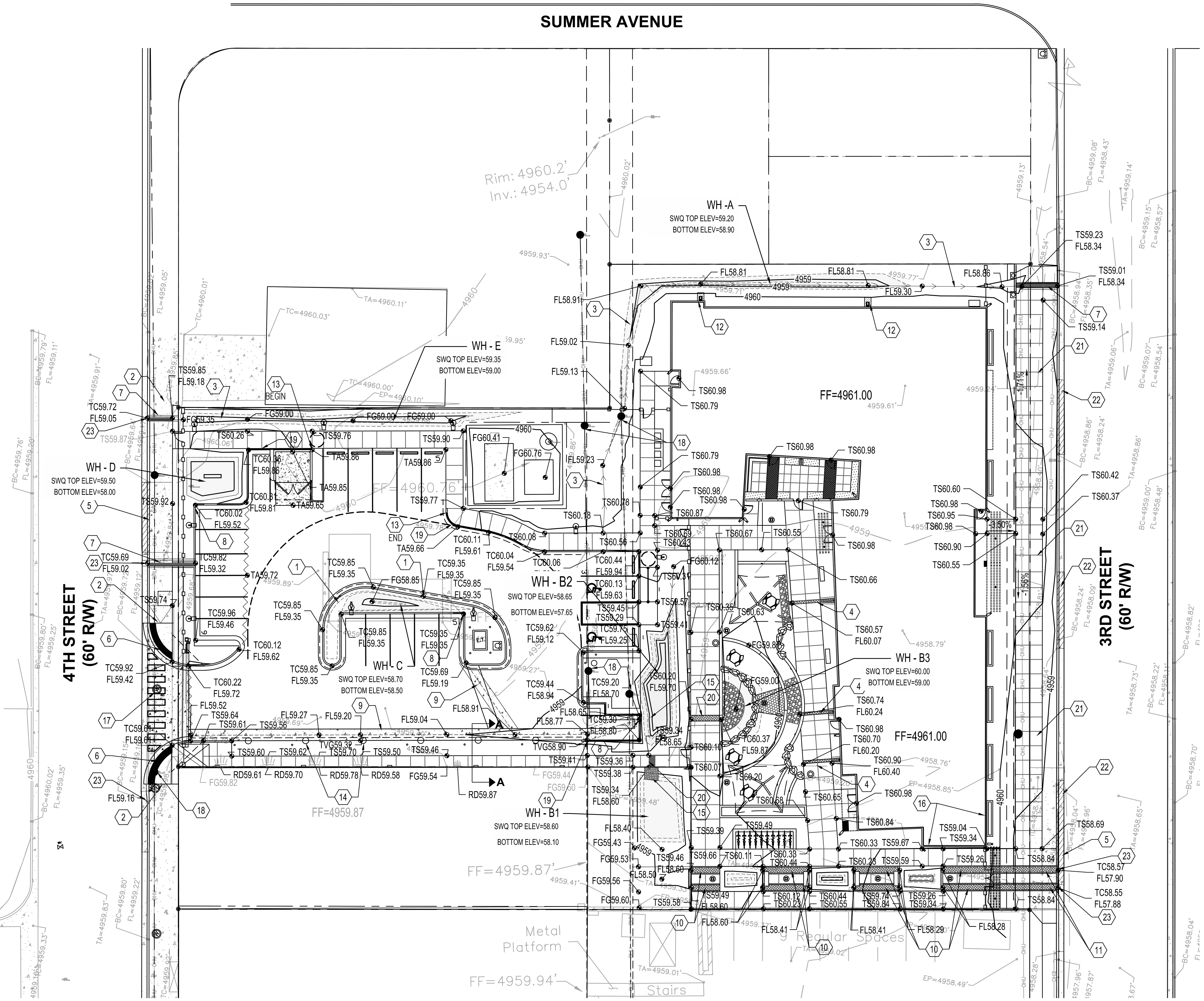
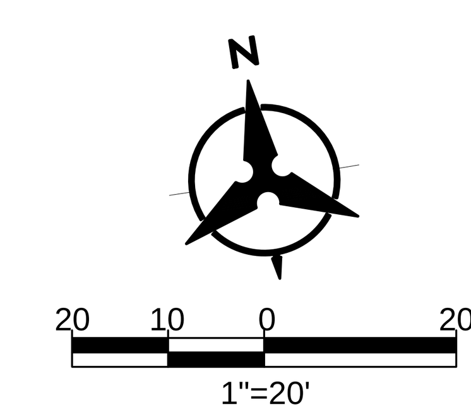
JOB NUMBER 18–13
DRAWN BY RMM
PROJECT MGR AP
DATE 12–31–2019
PHASE DRB SUBMITTAL

PROJECT Hope Works | Hope Village
1215 Third Street NW
Albuquerque, NM 87102

TITLE DRAINAGE MANAGEMENT PLAN

SHEET C101





NOTICE TO CONTRACTORS (SO 19)

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

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.

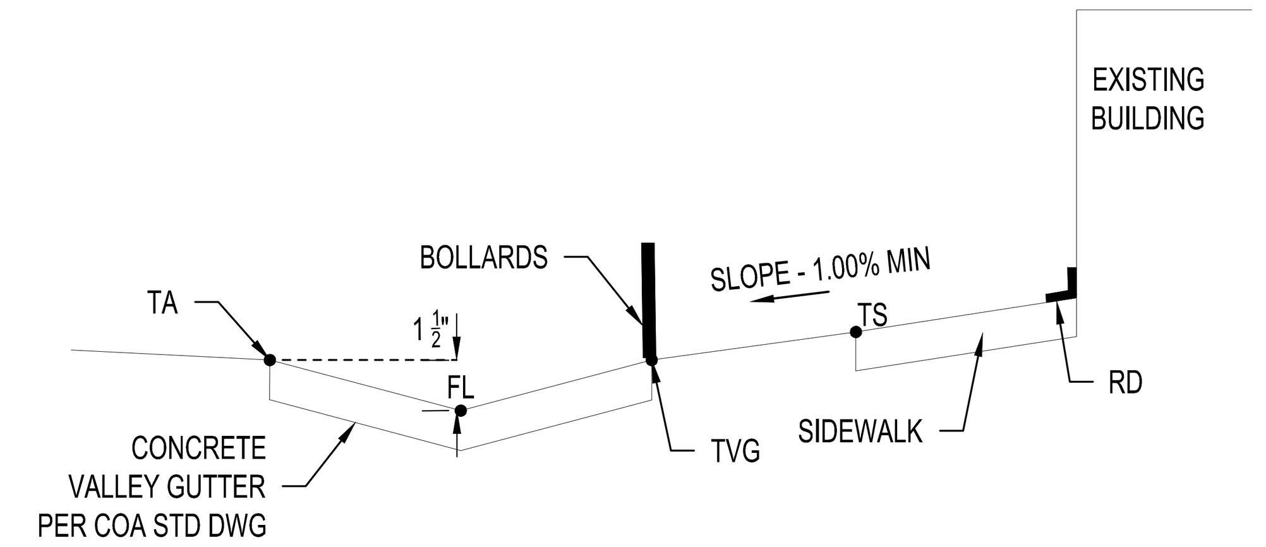
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.

6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		



SECTION A-A

NTS

LEGEND

- PROPERTY LINE
- PROPOSED BUILDING FOOTPRINT
- LIMITS OF GRADING
- EXISTING EASEMENT
- 4960 — EXISTING INDEX CONTOUR
- 4959 — EXISTING INTERMEDIATE CONTOUR
- XX.XX — EXISTING GROUND SPOT ELEVATION
- 5310 — PROPOSED INDEX CONTOUR
- 5309 — PROPOSED INTERMEDIATE CONTOUR
- XX.XX — PROPOSED FINISHED GRADE SPOT ELEVATION TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, RD= ROOF DRAIN, TVG=TOP OF VALLEY GUTTER.
- PROPOSED CURB & GUTTER
- XX% — DIRECTION OF FLOW
- WATER BLOCK/GRADE BREAK
- EXISTING ROOF DRAINS
- RIP RAP
- DIRECTION OF FLOW AT FL OF SWALE
- STORM WATER QUALITY VOLUME AREA
- BOLLARDS

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.

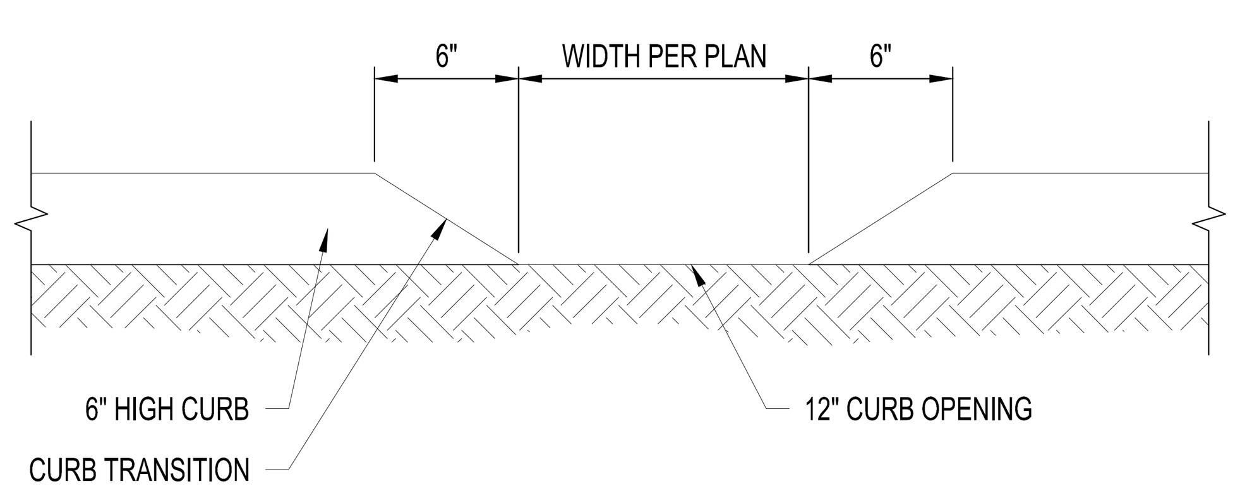
7. ALL PROPOSED SPOT ELEVATIONS AND CONTOURS REFLECT FINISHED GRADE OF TOP OF PAVEMENT AND FINISHED LANDSCAPING ELEVATIONS.

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.

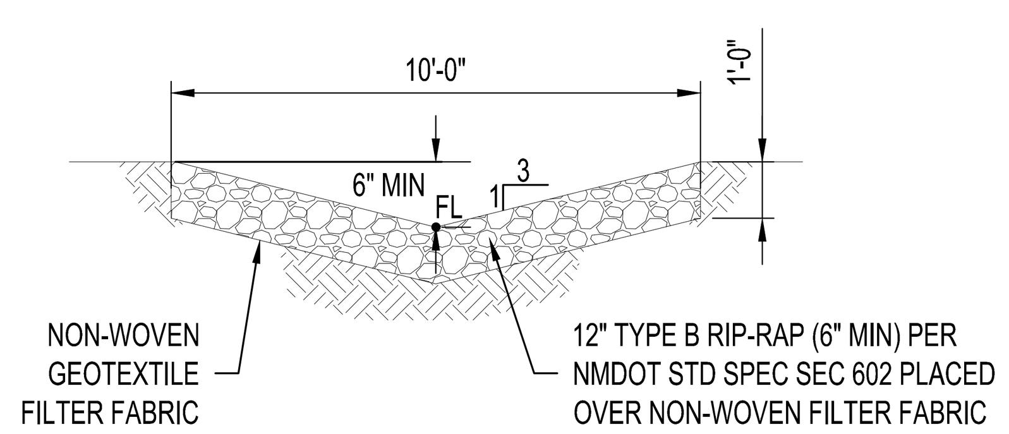
GRADING KEYED NOTES

1. INSTALL 12" CONCRETE CURB OPENING PER DETAIL 1.
2. MATCH EXISTING ELEVATION.
3. INSTALL RIP-RAP SWALE PER DETAIL 2.
4. INSTALL 12" SIDEWALK CULVERT PER COA STD DWG 2236. EXTEND CONCRETE CULVERT TO BUILDING . CENTER ROOF DRAIN OVER CONCRETE CULVERT.
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
7. INSTALL 12" SIDEWALK CULVERT PER COA STD DWG 2236. SO-19 PERMIT MUST BE OBTAINED.
8. INSTALL 24" CONCRETE CURB OPENING PER DETAIL 1.
9. INSTALL 4' WIDE CONCRETE VALLEY GUTTER PER COA DETAIL 2420.
10. INSTALL 2' WIDE CONCRETE SIDEWALK CULVERTS PER COA STD DWG 2236 . MODIFY DETAIL TO ACCOUNT FOR VARIED DEPTHS. DEPTH OF CULVERT VARIES PER PLAN ELEVATIONS.
11. INSTALL 2' WIDE CONCRETE SIDEWALK CULVERTS PER COA STD DWG 2236 . MODIFY DETAIL TO ACCOUNT FOR VARIED DEPTH OF CULVERT. DEPTH OF CULVERT VARIES PER PLAN ELEVATIONS. SO-19 PERMIT MUST BE OBTAINED.
12. INSTALL CONCRETE SPLASH PAD AT DOWNSPOUT.
13. INSTALL FLUSH CURB.
14. INSTALL BOLLARDS 20' APART. SEE ARCHITECTURAL PLANS FOR DETAILS.
15. INSTALL RIP RAP PAD PER DETAIL 3.
16. INSTALL RETAINING WALL. SEE STRUCTURAL PLANS.
17. SEE UTILITY PLAN. IF WATER STRUCTURE IS TO REMAIN, ADJUST RIM OF WATER VALVE BOX TO MATCH PROPOSED SURFACE.
18. EXISTING LIGHT POLE TO REMAIN IN PLACE AND BE PROTECTED.
19. TRANSITION FROM FLUSH CURB TO 6" CURB & GUTTER.
20. INSTALL 1 - 2' WIDE CONCRETE SIDEWALK CULVERT ADJACENT TO A 1 - 1' WIDE CONCRETE SIDEWALK CULVERT PER MODIFIED COA STD DWG 2236.
21. INSTALL NEW SIDEWALK. SEE ARCHITECTURAL PLAN FOR DETAILS. SO-19 PERMIT MUST BE OBTAINED.
22. REMOVE EXISTING FLUSH CURB AT NEAREST JOINT. INSTALL NEW STANDARD 8" CURB & GUTTER PER COA STD DWG 2415A.
23. MATCH EXISTING FLOW LINE ELEVATION. CONTACT ENGINEER WITH ANY DISCREPANCIES.



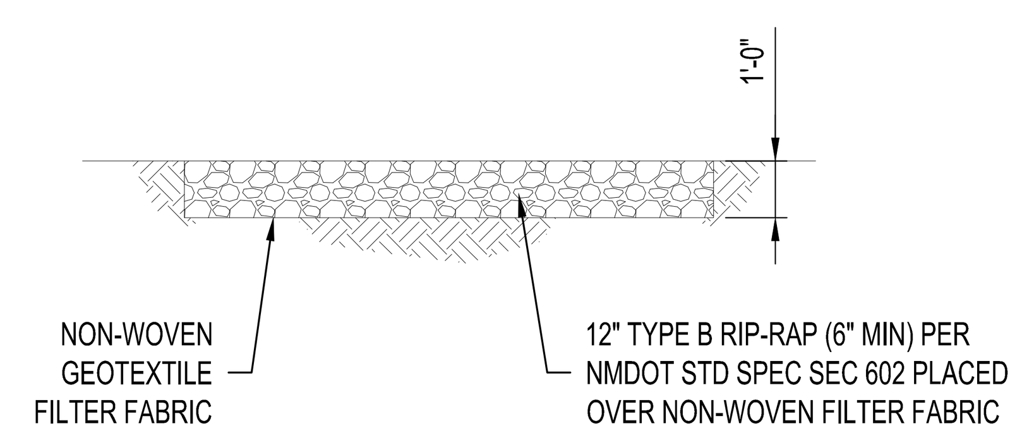
1 CURB CUT

NTS



2 RIP-RAP SWALE

NTS



3 RIP-RAP PAD

NTS

Bohannan Huston
www.bhinc.com 800.877.5332

REV	DATE	BY	DESCRIPTION

mullen heller architecture

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Hope Works | Hope Village
1215 Third Street NW
Albuquerque, NM 87102

TITLE
GRADING PLAN

SHEET
C100