CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

June 9, 2022

Scott Eddings, PE
Huitt-Zollars
333 Rio Rancho Blvd
Rio Rancho, NM 87124

RE: APD Crime Paving Improvements
5203 2nd St. NW
Grading and Drainage Plan
Engineer's Stamp Date: 6/7/22
Hydrology File: F15D019A

Dear Mr. Eddings:

Based upon the information provided in your submittal received [xx/xx/xxxx], the Grading &
Drainage Plan **is not** approved for Grading Permit. The following comments need to be
addressed for approval of the above referenced project:

General Notes
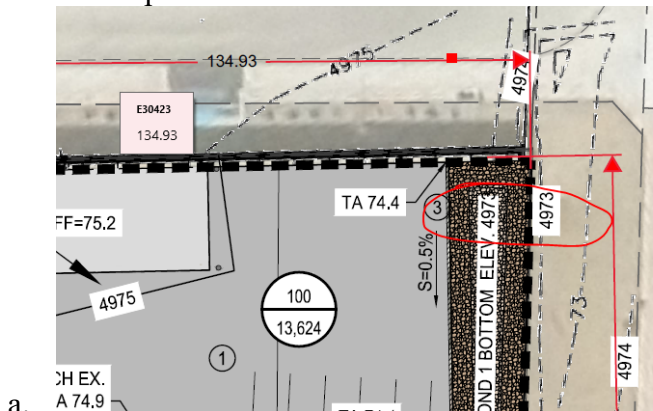
1. Please use a 1:20 scale.
2. Please fade back the existing G&D copied over and make it clear with a note that it is
    present and is for informational purposes. Perhaps outline or lightly hatch to explain that
    is existing? I leave that up to you to clearly communicate that it is existing.
3. Please clearly define the basing boundary as the area defined for construction limits of
    the proposed G&D.
4. Please provide a section of the pond and provide elevations (100 year storm, outlet
    elevation, SWQV elevation bottom etc…)
5. Please clearly
6. This is unclear (see image below) regarding what elevation this belongs to. Please clarify.
    Is it the countour? If so, it matches the pond bottom and I cannot tell what the top of pond
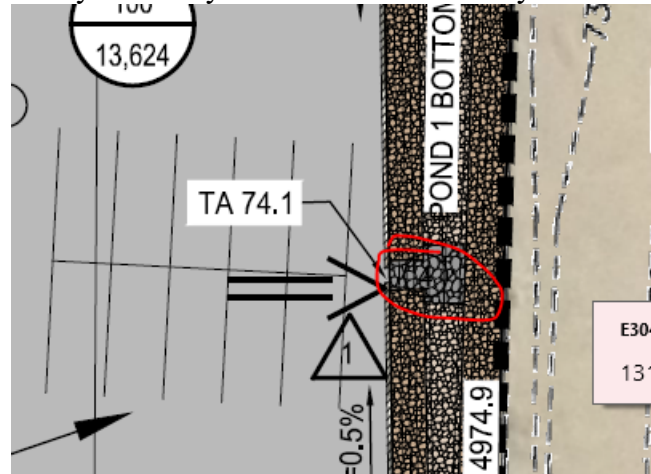   is and how it spills out.

    a.

7. Please clearly show keyed note 4. I could barely find it in the plan. See image below.

   a.

   b. Are there calculations showing the weir opening? Please demonstrate how it will handle the flow going into the pond.

   c. Provide a detail for construction purposes. It needs inverts at top and bottom as well.

8. Please clearly show a graphic of where the pond will discharge. (overflow)

9. Will there be a curb and gutter on this parking lot or simply edge of pavement? It is unclear the transition and if there is a flowline to get flow to the rundown.

10. Please provide benchmark coordinates and tie the construction limits to the benchmark.

11. Please include datum reference.

12. Please note this is a retention pond but note where emergency outlet will be.

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.

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

Sincerely,

David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Department

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

Project Title: APD CRIME PAVING IMPROVEMENTS **Building Permit #** BP-2021-37278 **Hydrology File #**_____

DRB#_____ **EPC#**_____

Legal Description: Tract A Sanchez-Mel Lath & Plaster _____ City Address OR Parcel 5203 Second St, NW _____

Applicant/Agent: Huitt-Zollars, Inc. _____ **Contact:** Scott Eddings _____

Address: 333 Rio Rancho Blvd _____ **Phone:** 505-235-7211 _____

Email: seddings@huitt-zollars.com _____

Applicant/Owner: City of Albuquerque APD _____ **Contact:** Stacy Herrera _____

Address: _____ **Phone:** 328-7471 _____

Email: stacyherrera@cabq.gov _____

TYPE OF DEVELOPMENT: ___PLAT (#of lots) __RESIDENCE __DRB SITE ___ ADMIN SITE: _x_
RE-SUBMITTAL: _____YES _x_ NO

DEPARTMENT: _____TRANSPORTATION _X_ HYDROLOGY/DRAINAGE
Check all that apply:

TYPE OF SUBMITTAL:	**TYPE OF APPROVAL/ACCEPTANCE SOUGHT:**
___ENGINEER/ARCHITECT CERTIFICATION	X BUILDING PERMIT APPROVAL
___PAD CERTIFICATION	___CERTIFICATE OF OCCUPANCY
___CONCEPTUAL G&D PLAN	___CONCEPTUAL TCL DRB APPROVAL
x GRADING PLAN	___PRELIMINARY PLAT APPROVAL
___DRAINAGE REPORT	___SITE PLAN FOR SUB'D APPROVAL
___DRAINAGE MASTER PLAN	___SITE PLAN FOR BLDG PERMIT APPROVAL
___FLOOD PLAN DEVELOPMENT PERMIT APP.	___FINAL PLAT APPROVAL
___ELEVATION CERTIFICATE	___SIA/RELEASE OF FINANCIAL GUARANTEE
___CLOMR/LOMR	___FOUNDATION PERMIT APPROVAL
___TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE	X GRADING PERMIT APPROVAL
	___SO-19 APPROVAL
___TRAFFIC CIRCULATION LAYOUT FOR DRB APPROVAL	X PAVING PERMIT APPROVAL
	___GRADING PAD CERTIFICATION
___TRAFFIC IMPACT STUDY (TIS)	___WORK ORDER APPROVAL
___STREET LIGHT LAYOUT	___CLOMR/LOMR
___OTHER (SPECIFY)	___FLOOD PLAN DEVELOPMENT PERMIT
___PRE-DESIGN MEETING?	___OTHER (SPECIFY)_____

DATE SUBMITTED: May 2, 2022 _____

PROPERTY

THIS SITE IS A DEVELOPED APD SUB-STATION AND CENTRAL FACILITY LOCATED WITHIN THE CITY OF ALBUQUERQUE (ZONE MAP F-15). THE SITE IS BOUND TO THE EAST BY THE AT&SF RAILROAD, TO THE NORTH AND SOUTH BY COMMERCIAL REALESTATE AND TO THE WEST BY SECOND STREET.

FLOOD ZONE

PER THE FEMA MAP NUMBER 35001C0119G DATED SEPTEMBER 26, 2008 SHOWS THE SITE IS NOT LOCATED WITHIN FLOOD HAZARD ZONE X.

MASTER DRAINAGE PLAN

PER THE APPROVED DRAINAGE MASTER PLAN PREPARED BY JMA, INC (NOVEMBER 1991), THE ALLOWABLE DISCHARGE FROM THE 13.3 ACRE SITE IS 5 CFS. A CITY OF ALBUQUERQUE PROJECT INSTALLED A 15-INCH STORM DRAIN TO THE ALAMEDA DRAIN TO THE WEST. A 10-INCH ORIFICE PLATE RESTRICTS THE DISCHARGE FROM THE SITE TO THE APPROVED RATE OF 5 CFS.

THIS PLAN ALSO REFERENCES APD FORENSIC LAB MODULAR BUILDING ADDITION GRADING AND DRAINAGE PLAN PREPARED BY ISAACSON & ARFMAN, P.A. DATED MARCH 11, 2011.

PROPOSED IMPROVEMENTS

THIS PROJECT CONVERTS AN EXISTING VEHICLE STORAGE LOT CONSTRUCTED OF CRUSHER FINES TO AN ASPHALT PAVEMENT VEHICLE STORAGE LOT PLUS CONVERTS APPROXIMATELY 5 PARKING STALLS TO COVERED PARKING.

PROPOSED DRAINAGE CONDIITIONS

PROJECT IMPROVEMENTS MAINTAIN DRAINAGE PATTERNS AND FLOWS IN ACCORDANCE WITH THE EXISTING APPROVED DRAINAGE PLAN. THE NEW PAVEMENTS DISCHARGE INTO A NEW POND WHICH HAS ADEQUATE CAPACITY TO STORE **TWICE** THE 100-YEAR 6-HOUR STORM EVENT. POND REQUIREMENT IS 2 TIMES THE 100-YEAR 6-HOUR STORM IS 4,706 CUBIC FEET. POND VOLUME IS 4,731 CUBIC FEET AND AND INNUDATES THE NEW VEHICLE STORAGE PARKING LOT WITH 2-INCHES OF STORM WATER.

THE NEW PARKING AREA DISCHARGES INTO POND 1 AT ANALYSIS POINT 1 AT A FLOW OF 1.36 CFS. A CONCRETE RUNDOWN 2' WIDE AND 6-INCHES DEEP CONVEY FLOWS TO THE POND 1 BOTTOM.

STORM WATER QUALITY

WATER QUALITY REQUIREMENTS TREATING THE PAVED AREAS.

VOLUME = 11,208 SF * 0.26IN/12 = 243 CUBIC FEET

A STORM WATER QUALITY POND IS PROVIDED EXCEEDING 243 CUBIC FT.

BENCHMARK

A STANDARD NMDOT BRASS CAP LOCATED ON THE NORTH MEDIAN NOSE AT INTERSECTION OF 2ND ST. AND MONTANO ROAD STAMPED 'STA.NM47-8' ELEVATION= 4976.43

HYDROLOGY

BASIN 100   AREA =   0.3 ac.

NOAA Atlas 14
Latitude   35.2649
Longitude   -106.6857

PRECIPITATION:		
360 =	2.3	in.
1440 =	3.21	in.
10day =	4.33	in.

	EXCESS PRECIPITATION:		PEAK DISCHARGE:	
TREATMENT A	0.62	in.	1.56	cfs/ac.
TREATMENT B	0.8	in.	2.28	cfs/ac.
TREATMENT C	1.03	in.	3.14	cfs/ac.
TREATMENT D	2.33	in.	4.70	cfs/ac.

	EXISTING CONDITIONS:	PROPOSED CONDITIONS:
	AREA	AREA
TREATMENT A	0 ac.	0 ac.
TREATMENT B	0 ac.	0 ac.
TREATMENT C	0.3045 ac.	0.0472 ac.
TREATMENT D	0 ac.	0.2573 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.62)x(0.00)+(0.80)x(0.00)+(1.03)x(0.30)+(2.33)x(0.00)/ 0.30 ac.
= 1.03 in.

V100-360 = (1.03)x(0.30)/ 12 = 0.026136 ac-ft = 1138 cf

EXISTING PEAK DISCHARGE:

Q100 = (1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.30)+(4.70)x(0.00) = 0.96 cfs

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.62)x(0.00)+(0.80)x(0.00)+(1.03)x(0.05)+(2.33)x(0.26)/ 0.30 ac.
= 2.13 in.

V100-360 = (2.13)x(0.30)/ 12.0 = 0.054010 ac-ft = 2353 cf

V100-1440 = (0.05)+(0.26)x(3.21 - 2.30)/ 12 = 0.073522 ac-ft = 3203 cf

V100-10day = (0.05)+(0.26)x(4.33 - 2.30)/ 12 = 0.097537 ac-ft = 4249 cf
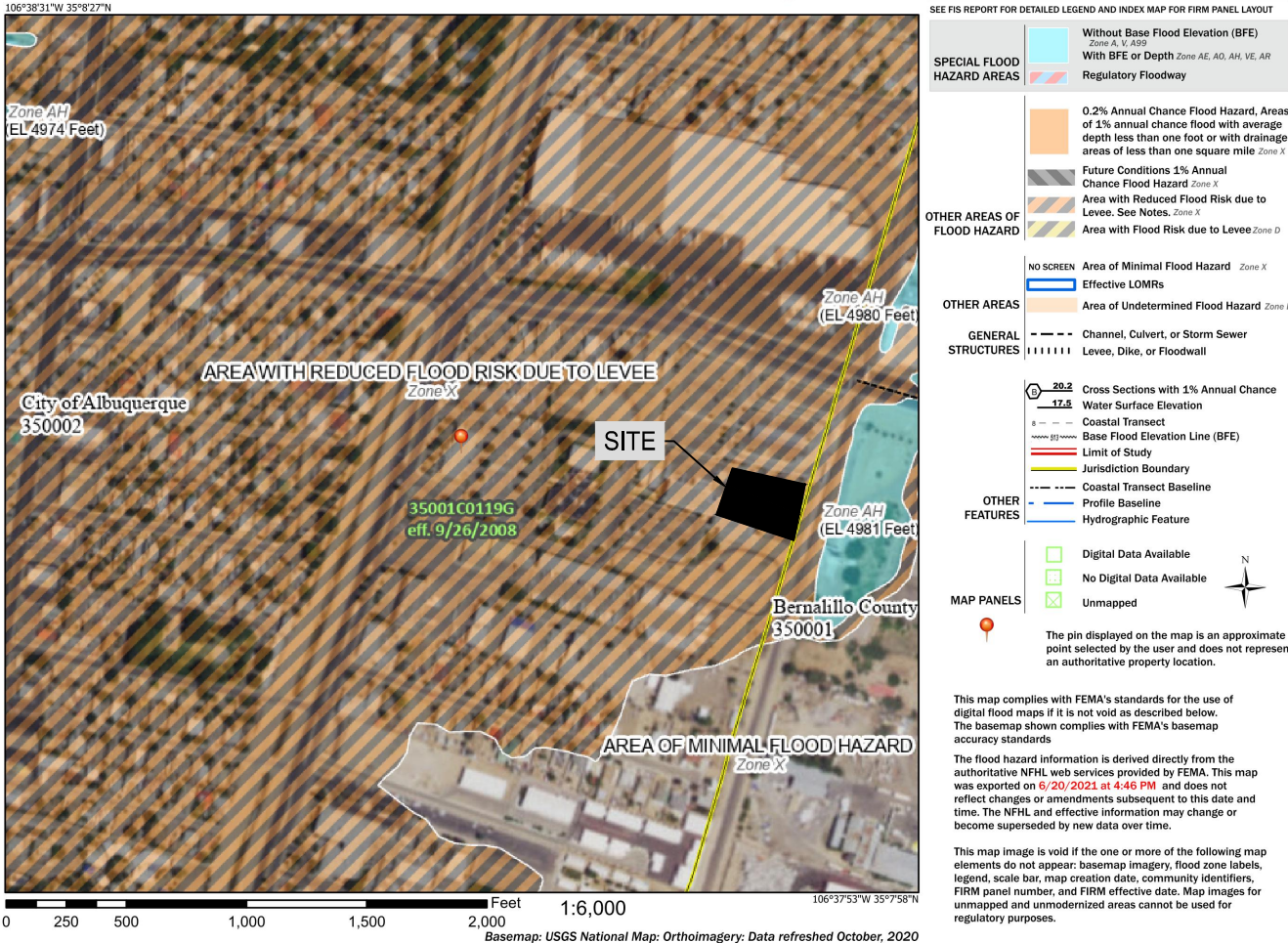
PROPOSED PEAK DISCHARGE:

Q100 = (1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.05)+(4.70)x(0.26) = 1.36 cfs

RESULTS

1.36 - 0.96 =	0.40 cfs	Increase in peak discharge
2353 - 1138 =	1,214 cf	Ponding Requirement

FIRMETTE

National Flood Hazard Layer FIRMette

ZONE ATLAS F-15-Z

IDO Zone Atlas
May 2018

F-15-Z

AGIS

POND CALCULATIONS

5320 Second Street

7-Jun-22
pondvol.xls

Pond

Elevation	Area	Average Area	Volume	Accumulative Volume
	sf	sf	Cu-Ft	Cu-Ft
4971.0	150			
		350	350.000	350.000
4972.0	550			
		783	782.500	1132.500
4973.0	1015			
		1281	1280.500	2063.000
4974.0	1546			
		2669	2668.800	4731.800
4974.6	7350			

SURVEY

GRADING PLAN IS BASED ON THE ENGINEER'S CERTIFICATION OF THE METROPOLITIAN FORENSIC SERVICES CENTER GRADING PLAN PREAPRED BY SCOTT MCGEE, NMPE NO 10519, DATED 3/21/02.

CONSTRUCTION NOTES

1. 3-INCH ASPHALT PAVEMENT OVER PREPARED SG.
2. 6-INCH CONCRETE CONCRETE - COVERED PARKING.
3. ASPHALT CURB.
4. CONCRETE RUNDOWN-2' WIDE WITH 6" INTEGRAL CURB

LEGEND

	PROPOSED CONCRETE SIDEWALK
	PROPOSED ASPHALT PAVEMENT
— — — —	BASIN BOUNDARY
⇐	DISCHARGE LOCATION
→ • • •	FLOW DIRECTION
∿∿∿	GRADE BREAK
+·+·+·+	LIMITS OF DISTURBANCE
XP-X / X.XX	BASIN ID / AREA (SF)
△ X	ANALYSIS POINT

GRADING PLAN

BACKGROUND IS THE SITE CITY
APPROVED GRADING PLAN

SCALE: 1" = 50'

MEVACON, LLC
APD CRIME LAB

TITLE:

GRADING PLAN

HUITT-ZOLLARS
Huitt-Zollars, Inc.   Albuquerque
6501 Americas Pkwy NE, Suite 550
Albuquerque, New Mexico 87110
Phone (505) 883-8114   Fax (505) 883-5022

DESIGNED BY: LRT
DRAWN BY: LRT
CHECKED BY: SAE
DWG NAME: 4_GRADING PLAN R1.dwg
PROJ #: R314022.01

Design Review Committee	City Engineer	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No. F-15-Z	Sheet 4	Of 12