CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

December 17, 2020

Scott Eddings, P.E.
Huitt-Zollars
333 Rio Rancho Blvd., Suite 101
Rio Rancho, NM 87124

RE: Bobby Foster and University Blvd.
Tract A-1-A-5 and Tract A-1-A-4
Grading and Drainage Plan Stamp Date: 9/9/20
Hydrology File: R16D100

Dear Mr. Eddings:

Based on the submittal received on 11/18/20, the Rough Grading Plan with supporting Drainage Study is approved for Grading Permit.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

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

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: Bobby Foster & Univ. Blvd Building Permit #: _____ Hydrology File #: R16D100

DRB#: PR-2020-004138 EPC#: _____ Work Order#: 3935.81

Legal Description: Tract A-1-A-5 and A-1-A-4

City Address: _____

Applicant: Huitt-Zollars, Inc Contact: Scott Eddings

Address: 333 Rio Rancho Blvd, NE Suite 101

Phone#: 505-235-7211 Fax#: _____ E-mail: seddings@huitt-zollars.co

Owner: MDS Investments LLC Contact: Kyle Bodhaine

Address: 4020 Vassar Drive NE Ste H

Phone#: 505-681-9932 Fax#: _____ E-mail: kyle@sc3intl.com

TYPE OF SUBMITTAL: X PLAT (___# OF LOTS) ____ RESIDENCE ____ DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X 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) _____
Y 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
X GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 17NOV20 By: Scott Eddings

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

EXISTING DRAINAGE CONDITIONS

THIS SITE IS UNDEVELOPED AND GENERALLY SLOPES FROM NORTHWEST TO SOUTHEAST TOWARDS AN EXISTING PLAYA. SITE IS PART OF THE MESA DEL SOL MASTER DRAINAGE PLAN AND MOST RECENTLY PART OF DRAINAGE REPORT FOR MESA DEL SOL RESIDENTIAL MONTAGE UNIT 3 AND 4 PREPARED BY BOHANNAN HUSTON, INC DATED AUGUST 10, 2020.

FLOOD ZONE

PER THE FEMA MAP NUMBER 35001 C0555H DATED AUGUST 16, 2012 SHOWS THE SITE IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE AREA.

ROUGH DRAINAGE CONDITIONS

DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE APPROVED DRAINAGE MASTER PLAN FOR MESA DEL SOL. THIS DRAINAGE PLAN IS ONLY FOR THE ROUGH GRADING OF WORK ORDER 3935.61.

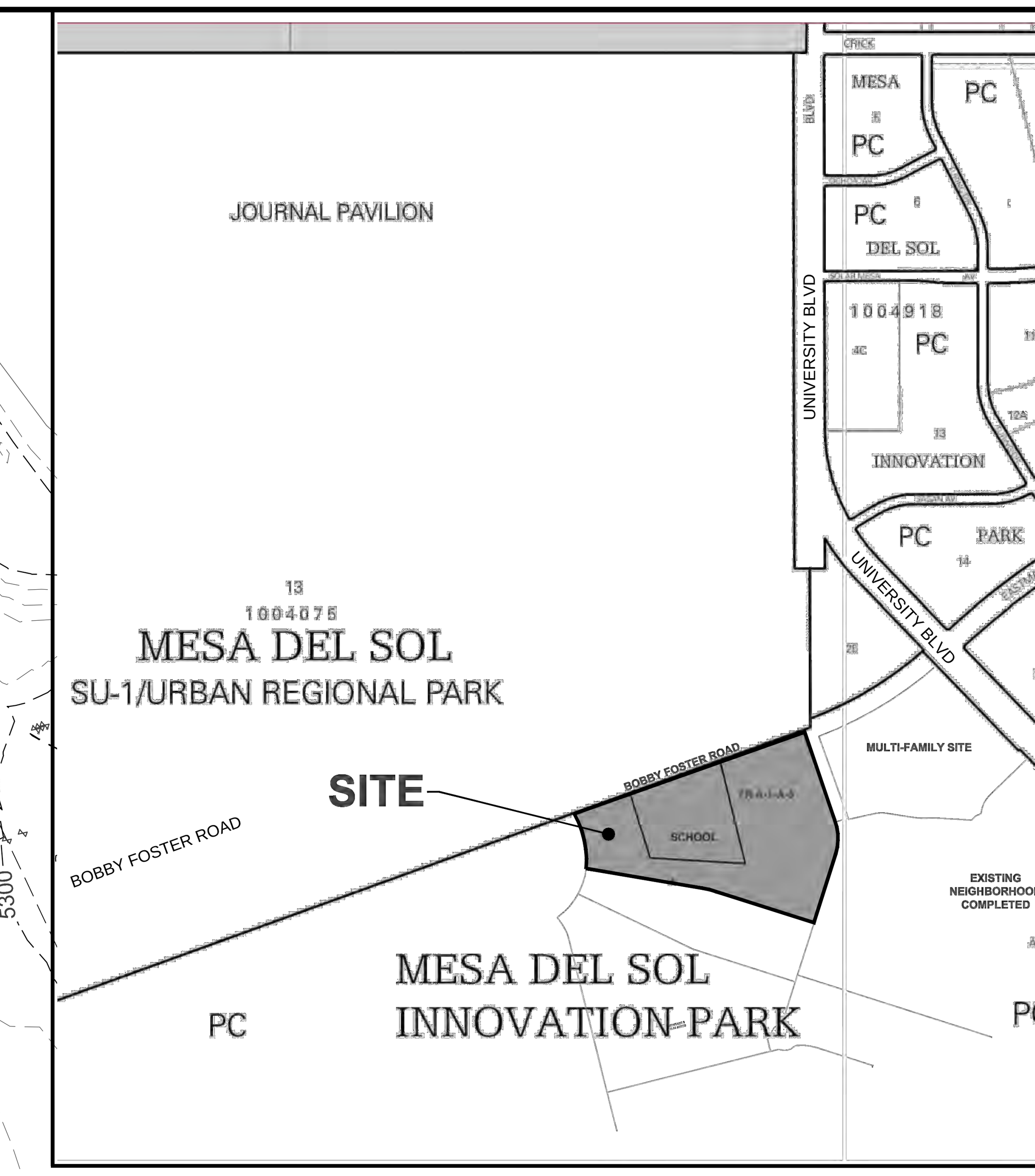
THE TOTAL DISTURBED AREA IS APPROXIMATELY 10.0 ACRES WITH THE FOLLOWING ESTIMATED LAND TREATMENTS:
A: 0% B: 0% C: 100% D: 0%
AND INCLUDES ROUGH GRADING OF LINEAR PARK POND.

EXCESS MATERIAL

EXCESS MATERIAL SHALL BE HAULED OFF SITE.

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
INITIAL EARTHWORK	1.000	1.300	435022.55 Sq. Ft.	67991.58 Cu. Yd.	501.10 Cu. Yd.	67490.48 Cu. Yd.<Cut>
Totals			435022.55 Sq. Ft.	67991.58 Cu. Yd.	501.10 Cu. Yd.	67490.48 Cu. Yd.<Cut>



VICINITY MAP

ZONE ATLAS MAPS
R-15-Z, R-16-Z

LEGEND

- EXISTING (INDEX) CONTOUR
- EXISTING (INTERMEDIATE) CONTOUR
- PROPOSED (INDEX) CONTOUR
- PROPOSED (INTERMEDIATE) CONTOUR
- FLOW DIRECTION
- GRADING LIMITS

GENERAL NOTES

1. PROJECT INCLUDES ROUGH GRADING FOR FUTURE CITY WORK ORDER 3935.81.
2. THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROJECT.
3. CONTRACTOR SHALL COMPLY WITH CITY, STATE, AND FEDERAL REQUIREMENTS FOR GRADING IN EXCESS OF 1 ACRE.

nm811 Know what's below. Call before you dig.
TWO WORKING DAYS BEFORE YOU DIG CALL 811 OR 260-1990

AS BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
FOUND MONUMENT "15-J12 1989"
STANDARD 3 1/4" ALUMINUM DISC
NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,487,534.543
E=1,511,214.742
ELEV=4965.627 (NAVD 1988)
GROUND TO GRID FACTOR=0.999685508
MAPPING ANGLE=-0°14'53.77"

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
NEW MEXICO 12856 REGISTERED PROFESSIONAL ENGINEER
11/17/20

REVISIONS
NO. | DATE | REMARKS | BY

DESIGN
DESIGNED BY: JLM — DATE: November 13, 2020
DRAWN BY: LRT — DATE: November 13, 2020
DWG NAME: ROUGH GRADING PLAN.dwg — PROJ #: R312703.01
CHECKED BY: SAE — DATE: November 13, 2020

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

SC³ INTERNATIONAL
4020 Vasar Drive NE Suite I

TITLE:
ROUGH GRADING PLAN

Design Review Committee	City Engineer		Mo./Day/Yr.	Mo./Day/Yr.
		Last Update		

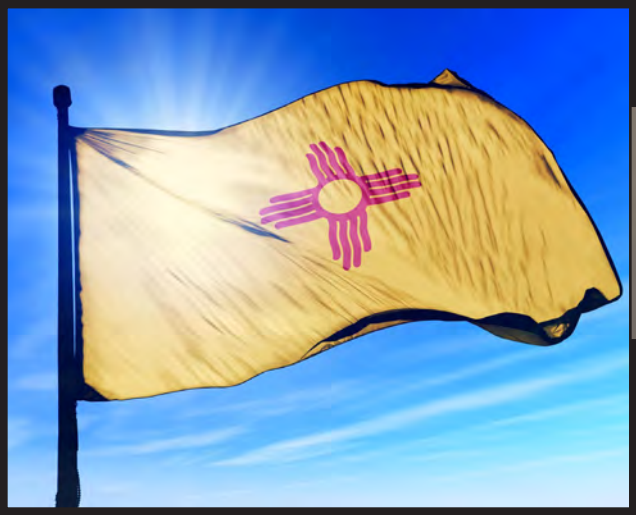
City Project No.	Zone Map No.	Sheet	Of
3935.81	R-15-Z, R-16-Z	1	1

N
0 100' 200'
SCALE: 1" = 100'

Plotted: 11/17/2020 7:26:21 PM, By: Eddings, Scott
H:\proj\R312703.01 University Blvd\10 CADD & BIM\10.1 AutoCAD\Sheet Set\ROUGH GRADING PLAN.dwg
Last Saved 11/17/2020 7:25:33 PM, seddings

DRAINAGE STUDY FOR BOBBY FOSTER ROAD AND UNIVERSITY BLVD.

PREPARED FOR:



Project Location:

Bobby Foster Road and
University Boulevard
Albuquerque, New Mexico

November 2020

PREPARED BY:

HUITT-ZOLLARS

333 RIO RANCHO DRIVE NE, SUITE 101
RIO RANCHO, NM 87124
505.892.5141; FAX 505.892.3259
WWW.HUITT-ZOLLARS.COM

BOBBY FOSTER ROAD AND UNIVERSITY BOULEVARD DRAINAGE STUDY

CITY OF ALBUQUERQUE
PROJECT NO. 3935.81

PREPARED FOR:

PREPARED BY:

HUITT-ZOLLARS
333 RIO RANCHO BLVD., SUITE 101
RIO RANCHO, NEW MEXICO 87124

NOVEMBER 2020

HZI Project No. R312703.01

Bobby Foster Road and University Boulevard Drainage Study

I, Nina Leung-Villa, being first duly sworn upon my oath, state that I am a registered professional engineer, qualified in civil engineering and that the accompanying report was prepared by me or under my supervision and is true and correct to the best of my knowledge and belief.

APPENDICES

INTRODUCTION

This drainage report addresses the proposed infrastructure required to convey the storm water runoff from proposed developments located southwest of the Bobby Foster Road and University Boulevard intersection. Existing and proposed conditions have been analyzed to determine infrastructure requirements for the proposed developments.

FLOOD HAZARD ZONE

The proposed site does not lie within a flood zone as shown on Flood Insurance Rate Map Number 35001C0555H, dated August 16, 2012. See Appendix A for the FEMA Flood Insurance Rate Map.

RELATED REPORTS

This report references the Drainage Report for Mesa del Sol Residential Montage Unit 1 and 2 by Bohannan Huston, Inc., dated January 14, 2011. That report provided analysis for this project site and the surrounding area. All hydrology calculations were completed for the 100-year, 6-hour storm. This drainage study will modify portions of the hydrology AHYMO model from the Montage Unit 1 and 2 report due to updated land uses.

This report also references the Drainage Report for Mesa del Sol Residential Montage Unit 3 and 4 by Bohannan Huston, Inc., dated August 10, 2020. That report resulting in upsizing of Pond 2A which is an outfall for this project site.

JURISDICTIONS OF PUBLIC AGENCIES

This project is located entirely within the City of Albuquerque (CoA) Municipal Limits and is therefore within their jurisdiction and must comply with the City's development requirements.

METHODOLOGY

This drainage report follows procedures outlined in the Development Process Manual, by City of Albuquerque (DPM). This report will utilize AHYMO for hydrology modeling to match modeling from the Montage Unit 1 and 2 report. See Appendix B for the AHYMO input and output files. The precipitation data has been updated according to NOAA Atlas Point Precipitation Frequency Estimates (Appendix B).

EXISTING CONDITIONS

The project site is currently undeveloped and generally slopes from northwest to southeast towards an existing playa. A portion of Bobby Foster Road drains toward the project site. University Boulevard drains south towards the playa. Refer to the Basin Map in Appendix D for existing and proposed flow patterns.

A series of retention ponds exists at the western boundary of the project site to capture flows from the west. A series of detention ponds exists within the project site to capture developed flows from an existing residential subdivision and the proposed developments of this project.

PROPOSED CONDITIONS

The project site is proposed for a mixture of commercial and residential developments. Please refer to the Basin Map in Appendix D for basin characteristics including area, type of development, and peak flow amounts. The naming convention for basins and general flow direction follows the basins as established with the Montage Unit 1 and 2 "Future Developed Conditions" Basin Map. As previously studied in recent drainage reports, the site has multiple ponding facilities which will provide the outfall for this site.

Basin S is proposed to be a single-family residential development which will drain west towards an existing retention pond that is sized to accept developed runoff from Basin S.

Basin Y-2 is proposed to be a multi-family residential development which will drain towards existing detention Pond 2B. Pond 2B is sized to accept developed runoff from Basin Y-2.

Refer to the table below for a flowrate comparison of Basin S and Basin Y-2. Because the proposed flowrate from these basins do not exceed the allowable flowrate, the existing retention pond and Pond 2B are not required to be revised with this drainage study.

Basin ID	Allowable Q per Montage Unit 1 and 2 (CFS)	Actual Q (CFS)
S	34.0	29.9
Y-2	8.9	8.6

Basins Park, T, U, V, W-1, W-2, and W-3 will drain towards Pond 1. Pond 1 is proposed as a detention pond that outfalls to Pond 2A. Pond 1 was designed with the Montage Unit 1 and 2 report and has been analyzed with the updated land uses presented with this project site. The original design of Pond 1 is sufficient for this proposed project and it will be constructed accordingly. For a hydrologic summary of Pond 1, refer to Appendix C. Hydrologic data was obtained from AHYMO results in Appendix B. Refer to the construction plans for this project for a detailed design of Pond 1.

Basins J, X, Bobby Foster, and Y-1 will drain towards Pond 2A. Pond 2A is an existing detention pond that outfalls to Pond 2B. Pond 2A was upsized with the Montage Unit 3 and 4 report and has been analyzed with the updated land uses presented with this project site. The revised design of Pond 2A is sufficient for this proposed project. For a hydrologic summary of Pond 2A, refer to Appendix C. Hydrologic data was obtained from AHYMO results in Appendix B. Refer to the Montage Unit 4 construction plans for a detailed design of Pond 2A.

A hydraulic analysis of the proposed storm drain system for each unit of development will occur with each development. Each unit of development will drain towards their outfalls via surface street flow and/or underground storm drain pipes.

STORMWATER QUALITY

As part of compliance with the stormwater quality program implemented by the City of Albuquerque in cooperation with the EPA, the existing and proposed detention and retention ponds will serve as a dual use stormwater quality management and flood control device. With the utilization of the ponds, the stormwater released within the project limits will be effectively treated.

CONCLUSION

This report provides a conceptual design and analysis of proposed improvements to safely manage stormwater generated within the project site. In addition to stormwater management, this project will integrate techniques to improve stormwater quality. For a detailed design, please refer to the construction plans to be completed in conjunction with this drainage study.