CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

March 15, 2021

Jeremy Shell, P.E.
Respec
5971 Jefferson St. NE
Albuquerque, NM 8710

RE: The Peaks by Markana
Conceptual Grading & Drainage Plan
Engineer's Stamp Date: 02/25/21
Hydrology File: C18D088

Dear Mr. Shell:

Based upon the information provided in your submittal received 02/25/2021, the Conceptual Grading & Drainage Plan is approved for Grading Permit and for action by the DRB on Platting action, Site Plan for Building Permit and Site Plan for Subdivision.

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 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: The Peaks by Markana Building Permit #: _____ Hydrology File #: _____

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

Legal Description: Lots 8-A, 11, and 12, Block 26, North Albuquerque Acres, Tract A, Unit B

City Address: _____

Applicant: Legacy Development Contact: _____

Address: _____

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

Other Contact: RESPEC Contact: Jeremy Shell

Address: 5971 Jefferson Street NE, Suite 101, Albuquerque NM 87109

Phone#: 505.918.1053 Fax#: _____ E-mail: jeremy.shell@respec.com

TYPE OF DEVELOPMENT: ____ PLAT (# of lots) ____ RESIDENCE X DRB SITE ___ ADMIN SITE

IS THIS A RESUBMITTAL? ____ Yes X No

DEPARTMENT ____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
X 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?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

____ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY

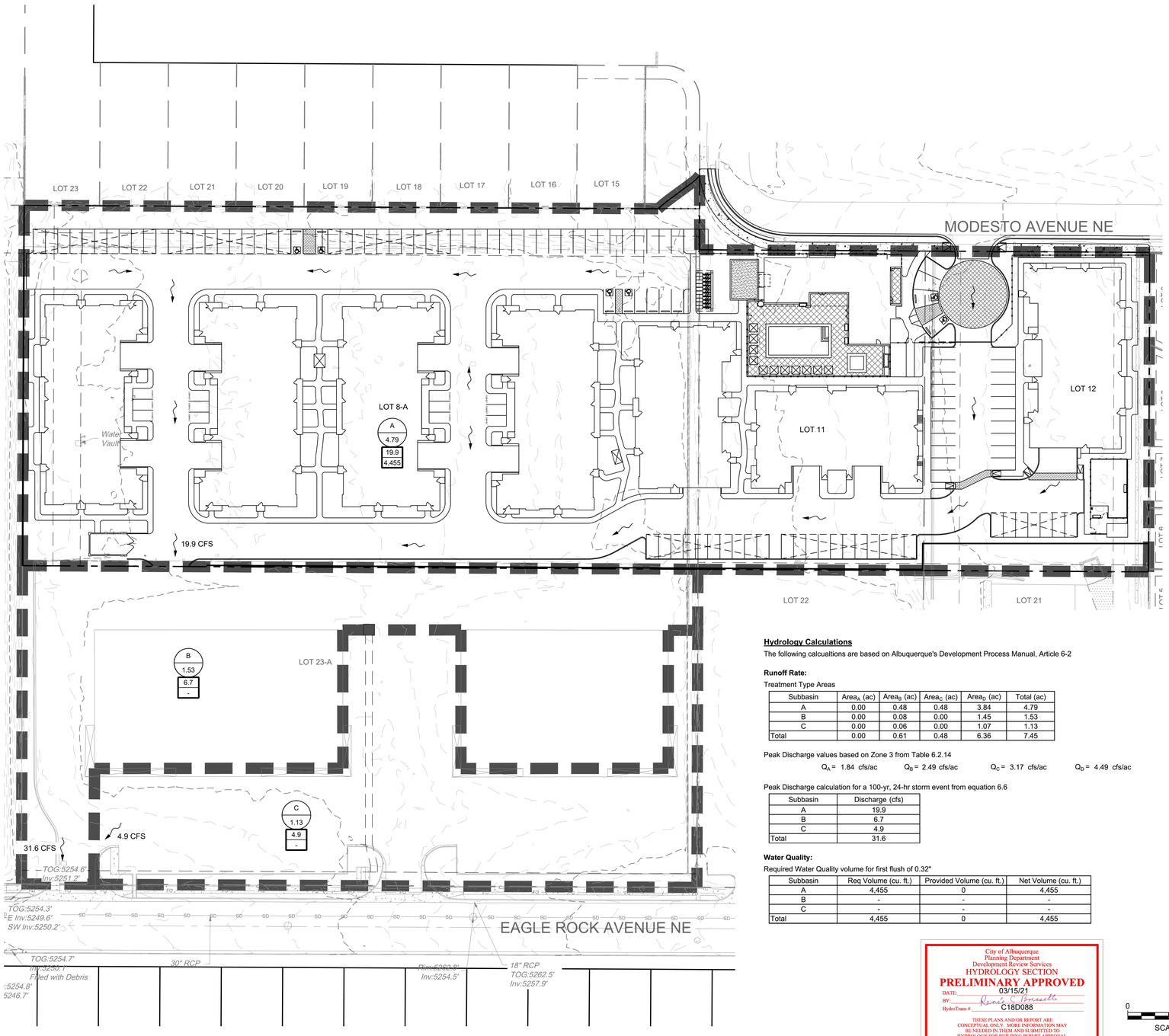
X PRELIMINARY PLAT APPROVAL
X SITE PLAN FOR SUB'D APPROVAL
X SITE PLAN FOR BLDG. PERMIT APPROVAL
X FINAL PLAT APPROVAL

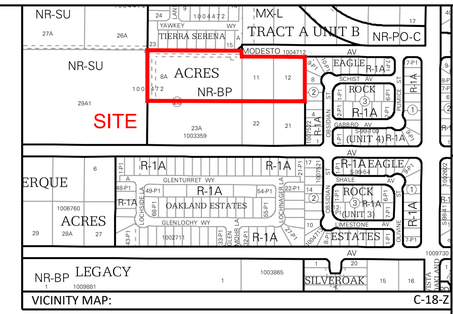
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
X GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 2/25/21 By: Jeremy Shell

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____





BACKGROUND

LOTS 8-A, 11, AND 12, BLOCK 26 NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B IS APPROXIMATELY 4.8 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED SOUTH OF MODESTO AVENUE AND NORTH OF THE EXISTING EAGLE ROCK BUSINESS CENTER. LOT 8-A WAS PREVIOUSLY DEVELOPED AS A HARLEY DAVIDSON TRAINING AREA. LOTS 11 AND 12 ARE PRIMARILY UNDEVELOPED WITH TWO EXISTING DRIVE AISLES THAT SERVE LOT 21. THE PROPOSED PROJECT IS A 120 UNIT APARTMENT COMPLEX. EXISTING SITE FEATURES WILL BE REMOVED. THE DRAINAGE REPORT FOR EAGLE ROCK BUSINESS CENTER BY MARK GOODWIN & ASSOCIATES 2008 SHOULD BE REFERENCED FOR BACKGROUND RELATED TO THE EAGLE ROCK BUSINESS CENTER. THERE IS IS NO DESIGNATED 100-YEAR FLOODPLAIN SHOWN ON THE SITE.

METHODOLOGY

HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) ARTICLE 6.2 USING THE RATIONAL METHOD TO CALCULATE PEAK FLOW RATES TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. THE REQUIRED WATER QUALITY VOLUME WAS CALCULATED BY MULTIPLYING THE IMPERVIOUS AREA BY THE FIRST FLUSH RUNOFF VALUE OF 0.32". THIS IS A WEIGHTED VALUE BASED ON THE AMOUNT OF AREA THAT IS CONSIDERED REDEVELOPMENT AND AREA THAT IS NEW DEVELOPMENT. ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS

THE SITE, IN GENERAL, SLOPES FROM EAST TO WEST AT A SLOPE OF APPROXIMATELY 2% - 3%. STORM WATER RUNOFF GENERATED BY THE SITE DRAINS SOUTH THROUGH THE EAGLE ROCK BUSINESS CENTER AND ULTIMATELY DISCHARGES TO EAGLE ROCK AVENUE.

DEVELOPED CONDITIONS

THE DRAINAGE INTENTION OF THE DEVELOPED CONDITIONS IS TO MATCH THE EXISTING DRAINAGE PATTERN AND NOT TO EXCEED THE AMOUNT DISCHARGING TO EAGLE ROCK AVENUE UNDER EXISTING CONDITIONS.

SUB-BASIN A IS THE NEW APARTMENT DEVELOPMENT. IT CONTAINS 4.79 ACRES AND GENERATES 19.9 CFS. SIMILAR TO EXISTING CONDITIONS, THIS SUB-BASIN DISCHARGES TO THE EAGLE ROCK BUSINESS CENTER (SUB-BASN B) AND EVENTUALLY OUT INTO EAGLE ROCK AVENUE.

SUB-BASIN B IS THE NORTHERN AND WESTERN PORTIONS OF THE EAGLE ROCK BUSINESS CENTER. IT IS 1.53 ACRES AND GENERATES 6.7 CFS. THIS SUB-BASIN DISCHARGES DIRECTLY TO EAGLE ROCK AVENUE AT THE SOUTHWEST CORNER OF THE EAGLE ROCK BUSINESS CENTER SITE.

SUB-BASIN C IS THE SOUTHERN PORTION OF THE EAGLE ROCK BUSINESS CENTER. IT IS 1.13 ACRES AND GENERATES 4.9 CFS. THIS SUB-BASIN DISCHARGES INTO SUB-BASIN B AT THE SOUTHWEST CORNER OF THE EAGLE ROCK BUSINESS CENTER SITE.

THE TOTAL FLOW RATE DISCHARGING TO EAGLE ROCK AVENUE UNDER DEVELOPED CONDITIONS IS 31.6 CFS. PER THE DRAINAGE REPORT FOR EAGLE ROCK BUSINESS CENTER, THE TOTAL FLOW RATE DISCHARGING TO EAGLE ROCK IS 32.26 CFS. THEREFORE, THE DEVELOPED CONDITIONS FLOW RATE IS LESS THAN THE ALLOWABLE RATE.

THE WATER QUALITY TABLE ON THIS SHEET UNDER "HYDROLOGY CALCULATIONS" SUMMARIZES THE WATER QUALITY VOLUMES REQUIRED FOR DEVELOPED CONDITIONS. THE OWNER HAS ELECTED TO PAY THE FEE-IN-LIEU OF STORM WATER QUALITY PONDING REQUIREMENTS. THE TOTAL VOLUME REQUIRED IS 4,455 CUBIC FEET. THEREFORE, THE PAYMENT AMOUNT IS 4,455 CF X $8/CF = $35,640.

Hydrology Calculations

The following calcualtions are based on Albuquerque's Development Process Manual, Article 6-2

Runoff Rate:

Treatment Type Areas

Subbasin	Area$_A$ (ac)	Area$_B$ (ac)	Area$_C$ (ac)	Area$_D$ (ac)	Total (ac)
A	0.00	0.48	0.48	3.84	4.79
B	0.00	0.08	0.00	1.45	1.53
C	0.00	0.06	0.00	1.07	1.13
Total	0.00	0.61	0.48	6.36	7.45

Peak Discharge values based on Zone 3 from Table 6.2.14

Q_A = 1.84 cfs/ac Q_B = 2.49 cfs/ac Q_C = 3.17 cfs/ac Q_D = 4.49 cfs/ac

Peak Discharge calculation for a 100-yr, 24-hr storm event from equation 6.6

Subbasin	Discharge (cfs)
A	19.9
B	6.7
C	4.9
Total	31.6

Water Quality:

Required Water Quality volume for first flush of 0.32"

Subbasin	Req Volume (cu. ft.)	Provided Volume (cu. ft.)	Net Volume (cu. ft.)
A	4,455	0	4,455
B	-	-	-
C	-	-	-
Total	4,455	0	4,455

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 03/15/21
BY: Renée C. Brissette
HydroTrans # C18D088
THESE PLANS AND/OR REPORT ARE CONCEPTUAL ONLY. MORE INFORMATION MAY BE NEEDED IN THEM AND SUBMITTED TO HYDROLOGY FOR BUILDING PERMIT APPROVAL.

LEGEND:

XX / XX — BASIN DESIGNATION / BASIN AREA, ACRES — BASIN NAME AND AREA

XX / XX — 100 YEAR STORM, CFS / REQUIRED WATER QUALITY VOLUME — BASIN HYDROLOGIC RESULTS

SUB-BASIN BOUNDARY

FLOW ARROW

0 40' 80'
SCALE: 1" = 40'

RESPEC
COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPEC.COM PHONE: (505)253-9718

DESIGNED JS
DRAWN JS
CHECKED JS
DATE 2.25.2021

REVISION

STAMP

JEREMY W SHELL
NEW MEXICO
26341
PROFESSIONAL ENGINEER
2/25/21

PRELIMINARY
NOT FOR CONSTRUCTION
2/2021

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

nm811 Know what's below. Call before you dig.

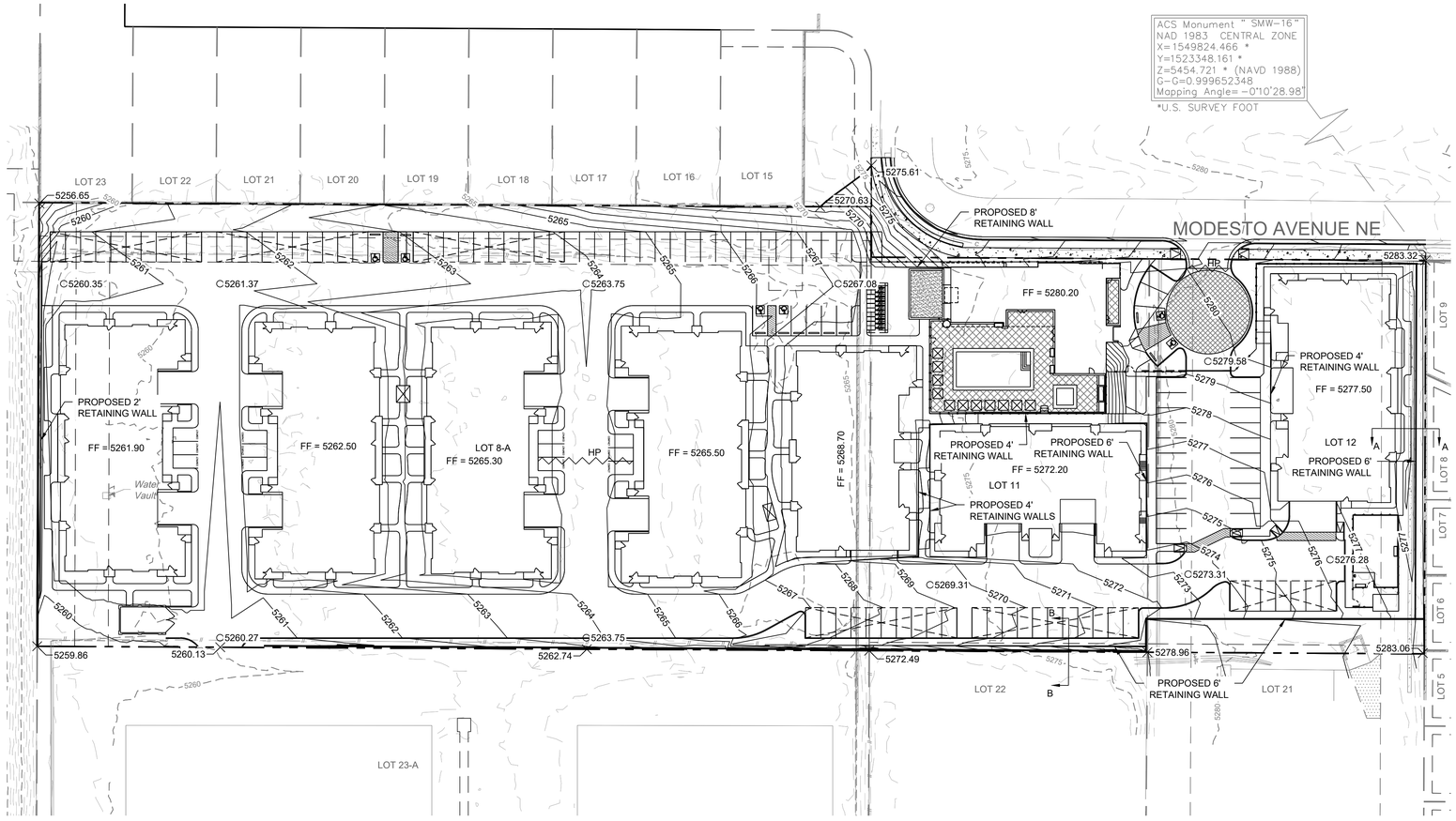
PROJECT NAME: THE PEAKS BY MARKANA

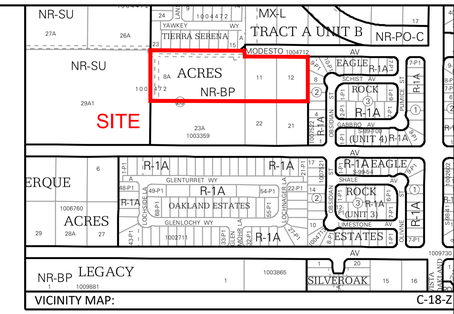
SHEET TITLE: CONCEPT DRAINAGE PLAN

SUBMITTED FOR: DRB SITE PLAN

SHEET NUMBER: C-100

NAME: N:\Projects\03711 Legacy Modesto\3. DWG\Sheets\03711 Modesto Drainage.dwg PLOT DATE: Feb 25, 2021 10:44am





NOTE:

1. THE EXISTING SITE FEATURES WILL BE DEMOLISHED UNLESS OTHERWISE SPECIFIED ON THIS PLAN.

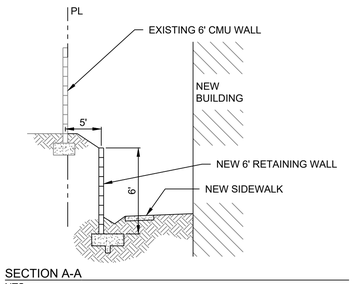
GRADING NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING DRY AND WET UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY ISSUES. UTILITY RELOCATION MAY BE REQUIRED.
2. FINISH GRADE OF SOIL EDGES ALONG PAVEMENT TO BE 1/2" BELOW EDGE OF PAVEMENT.
3. STRIP AND STOCKPILE TOPSOIL FROM GRADING AREAS. USE STOCKPILED TOPSOIL AND IMPORTED TOPSOIL AS NECESSARY FOR SURFACE RESTORATION.
4. GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS AND PLACEMENT OF TOPSOIL.
5. GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.
6. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE WITH APPLICABLE REGULATIONS.
7. PROVIDE TEMPORARY GRADING FEATURES SUCH AS BERMS, SWALES, SUMPS AND BASINS TO MANAGE INTERIM STORM WATER RUNOFF DURING CONSTRUCTION PROCESS. STORM WATER RUNOFF LEAVING THE SITE SHALL MEET ALL FEDERAL, STATE AND LOCAL QUALITY REQUIREMENTS.
8. REFER TO GEOTECHNICAL EVALUATION REPORT 3220JJ138 BY WESTERN TECHNOLOGIES, INC. DATED JANUARY 12, 2021.

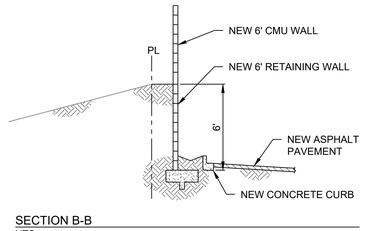
LEGEND:

- PROPERTY BOUNDARY
- 5270 PROPOSED MAJOR CONTOUR
- 5272 PROPOSED MINOR CONTOUR
- 5270 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED HIGH POINT

0 40' 80'
SCALE: 1" = 40'



SECTION A-A
NTS



SECTION B-B
NTS

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SUBMITTED FOR: DRB SITE PLAN

SHEET NUMBER: C-101

NAME: N:\Projects\037111 Legacy Modesto\03_DWG\Sheets\037111 Modesto Grading.dwg PLOT DATE: Feb 25, 2021 12:29pm