

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

June 1, 2023

Ron Bohannon, P.E.
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM, 87109

RE: Sawmill Tract J, 800 20th St. NW
Conceptual Grading & Drainage Plan
Engineer's Stamp Date: 2/28/2023
Hydrology File: J13D076B

Dear Mr. Bohannon:

Based upon the information provided in your submittal received 6/1/2023, the Conceptual Grading & Drainage Plan is preliminarily approved for action by the DHO on Site Plan for Building Permit Approval.

PO Box 1293

PRIOR TO BUILDING PERMIT:

Albuquerque

- Provide more detailed design as needed in order to obtain Hydrology's approval.

NM 87103

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.

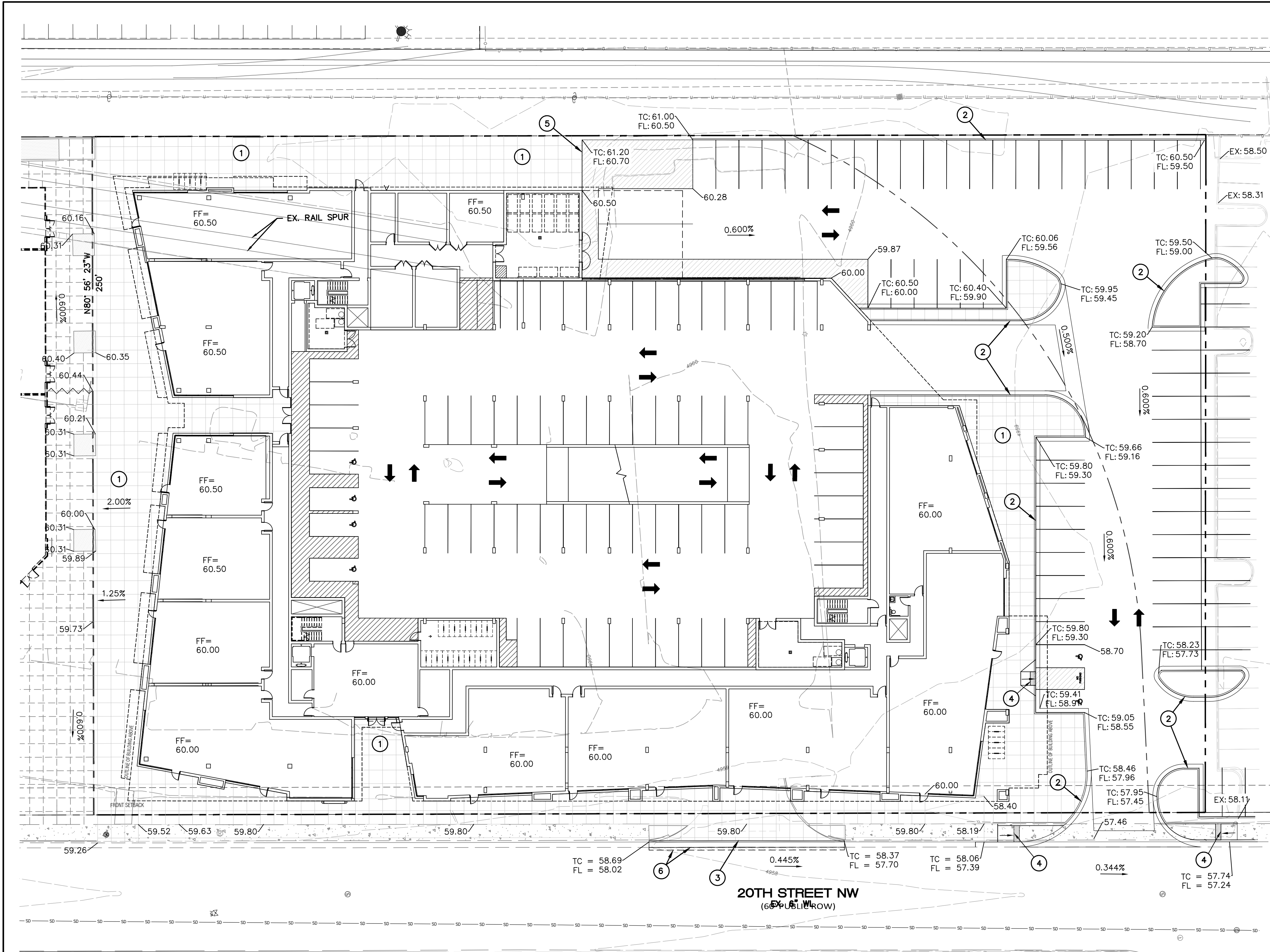
www.cabq.gov

If you have any questions, please contact me at 505-924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services

DATE SUBMITTED: 05.23.2023



EROSION CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.
6. ALL SLOPES NOT STABILIZED AT THE END OF THE PROJECT SHALL BE STABILIZED IN ACCORDANCE WITH COA SPECS OR $\frac{1}{2}$ " GRAVEL.

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN 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 INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. 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.

LEGEND

| | |
|--|-------------------------|
| | CURB & GUTTER |
| | BOUNDARY LINE |
| | RIGHT-OF-WAY |
| | BUILDING |
| | PROPOSED SIDEWALK |
| | EXISTING CURB & GUTTER |
| | WATER BLOCK |
| | LANDSCAPING |
| | EXISTING INDEX CONTOUR |
| | EXISTING CONTOUR |
| | EXISTING STORM SEWER |
| | EXISTING SANITARY SEWER |
| | PROPOSED DROP INLET |
| | PROPOSED SDMH |
| | PROPOSED SPOT ELEVATION |

CAUTION

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

EXISTING DRAINAGE

THIS SITE IS CURRENTLY A RETAIL WAREHOUSE WITH PAVED PARKING IN FRONT AND SIDES AND AN OLD RAIL SPUR IN THE BACK. THE SITE IS BOUNDED BY COMMERCIAL BUILDINGS TO THE EAST AND SOUTH AND BELLAMAH AVENUE TO THE NORTH WITH 20TH STREET TO THE WEST CONTAINING APPROXIMATELY 3.94 ACRES. THE SITE IS TO BE REPLATED AND THIS PROJECT WILL CONTAIN THE SOUTH 2.05 ACRES OF THE EXISTING SITE. THIS PORTION OF THE SITE DRAINS TO DROP INLETS IN 20TH STREET. THE DISCHARGE TO THE DROP INLET IS 8.30 CFS.

HISTORICALLY THE SITE PREVIOUSLY FREE DISCHARGED 9.32 CFS TO 20TH STREET PRIOR TO THE PARKING LOT IMPROVEMENTS THAT CURRENTLY EXIST. IT IS THIS ALLOWABLE DISCHARGE THAT THIS PROJECT WILL NOT EXCEED.

THERE ARE NO OFFSITE FLOWS THAT ENTER THE SITE. THE SITE IS LOCATED ON FIRM MAP 35001C0331H AS SHOWN ABOVE. THE MAP SHOWS THAT THE SITE DOES LIE WITHIN A ZONE AH 100 YEAR FLOOD PLAIN AT AN ELEVATION OF 4959. THE SITE GENERATES A TOTAL OF 8.30 CFS WITH A 100YR, 6-HR VOLUME OF 0.227 AC-FT.

PROPOSED DRAINAGE

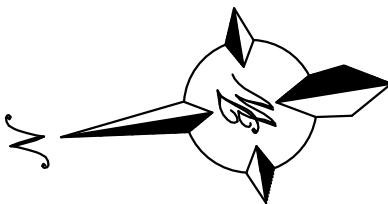
THE SITE IS WITHIN THE SAWMILL/WELLS PARK METROPOLITAN REDEVELOPMENT AREA AND THE CITY IS CURRENTLY MASTER PLANNING THE STREET NETWORK AROUND THIS SITE TO PROMOTE PEDESTRIAN CONNECTIVITY AND TRAFFIC CALMING. THAT WORK IS IN PROGRESS AND NOT PART OF THIS PROJECT.

THE SITE CONSISTS OF ONE BASIN THAT DRAINS TO 20TH STREET AS IT DOES IN THE EXISTING CONDITION. ALL STORM WATER IS ROUTED VIA SURFACE RUNOFF TO THE EXISTING INLET IN 20TH STREET. THE BUILDING FINISHED FLOOR ELEVATION IS SET TO BE AT LEAST ONE FOOT ABOVE THE ZONE AH FLOOD ELEVATION OF 4959.

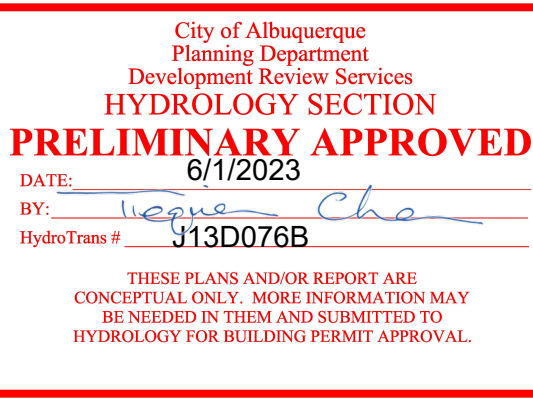
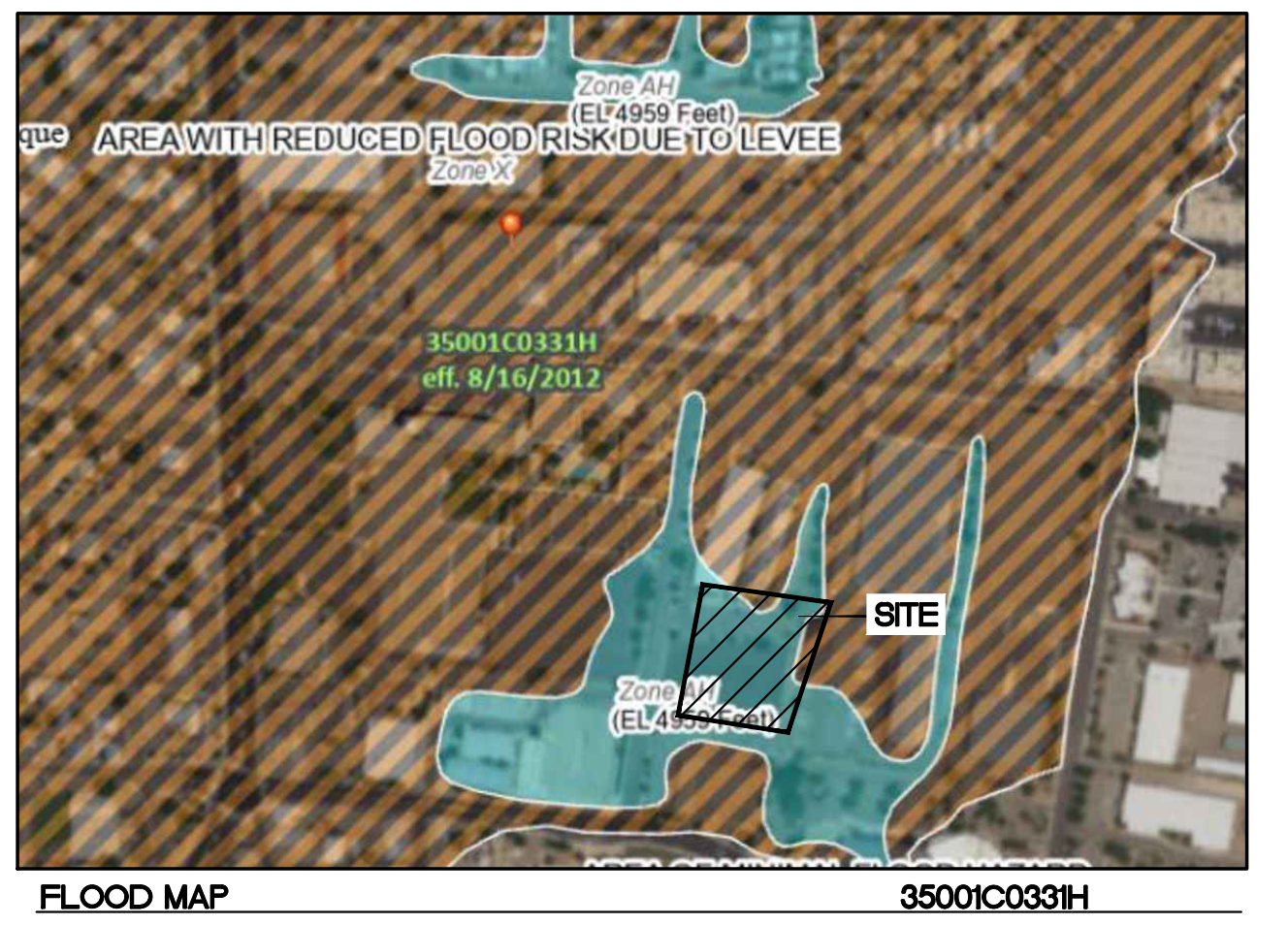
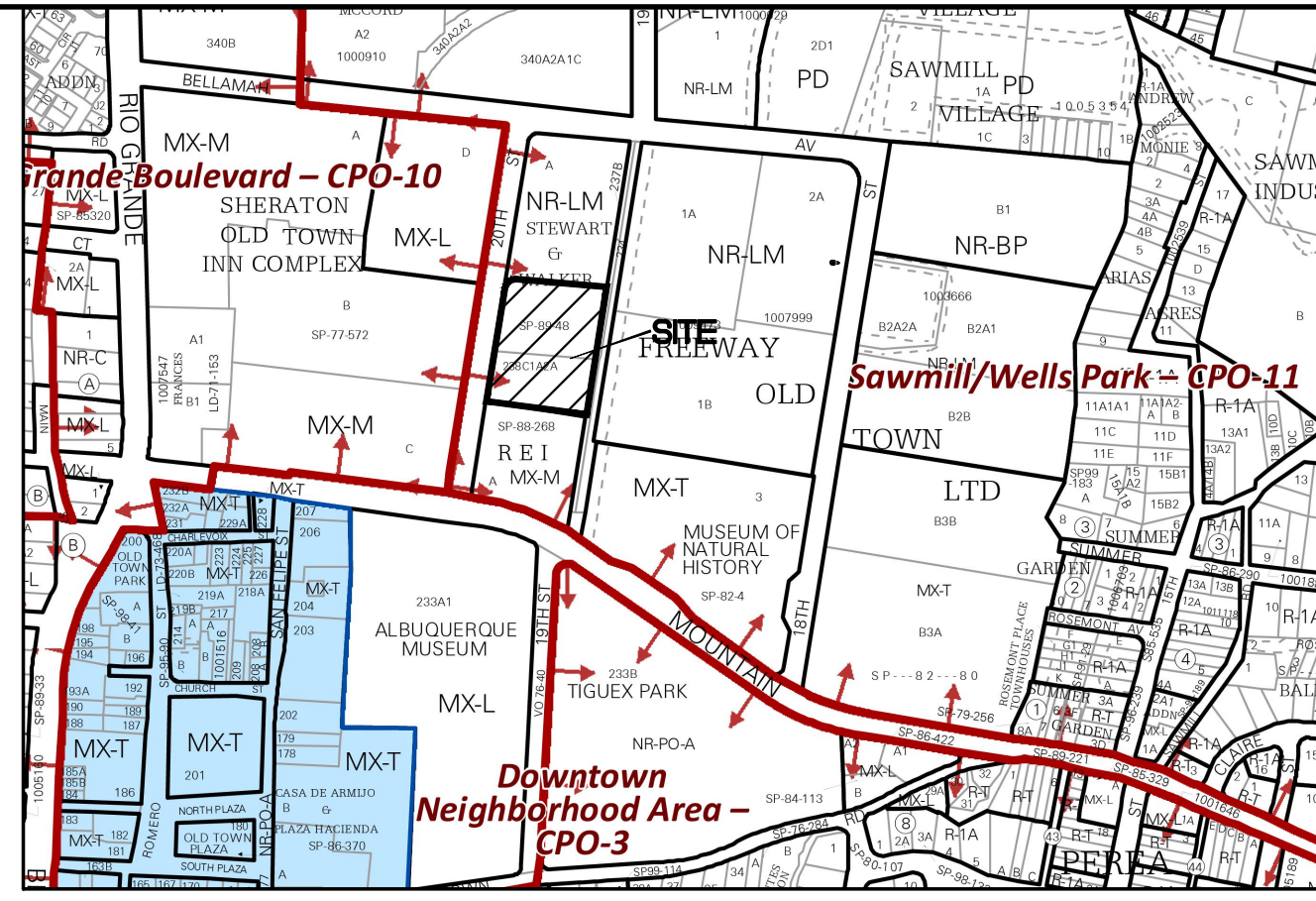
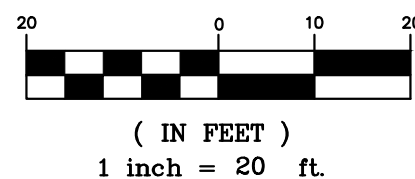
DUE TO THE HIGH INTENSITY DEVELOPMENT AND PLANNED HARDSCAPES FOR THIS AREA THERE IS NOT AN OPPORTUNITY TO RETAIN THE WATER QUALITY VOLUME. AS THIS SITE IS BEING CONSTRUCTED WITHIN A METROPOLITAN REDEVELOPMENT AREA AND WITHIN THE 1959 CITY LIMITS THE PAYMENT IN-LIEU FEE IS WAIVED PER THE DPM.

KEYED NOTES

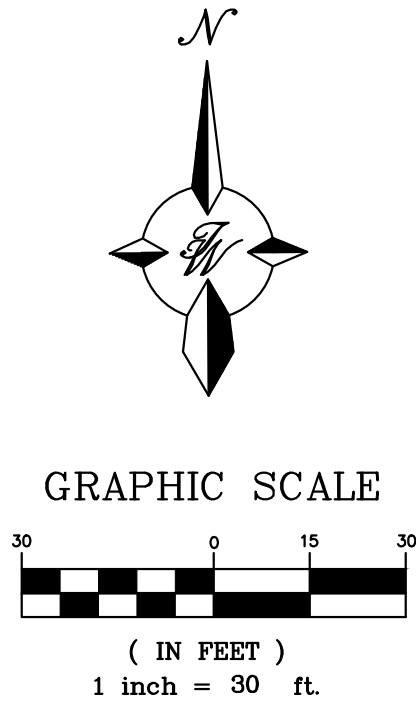
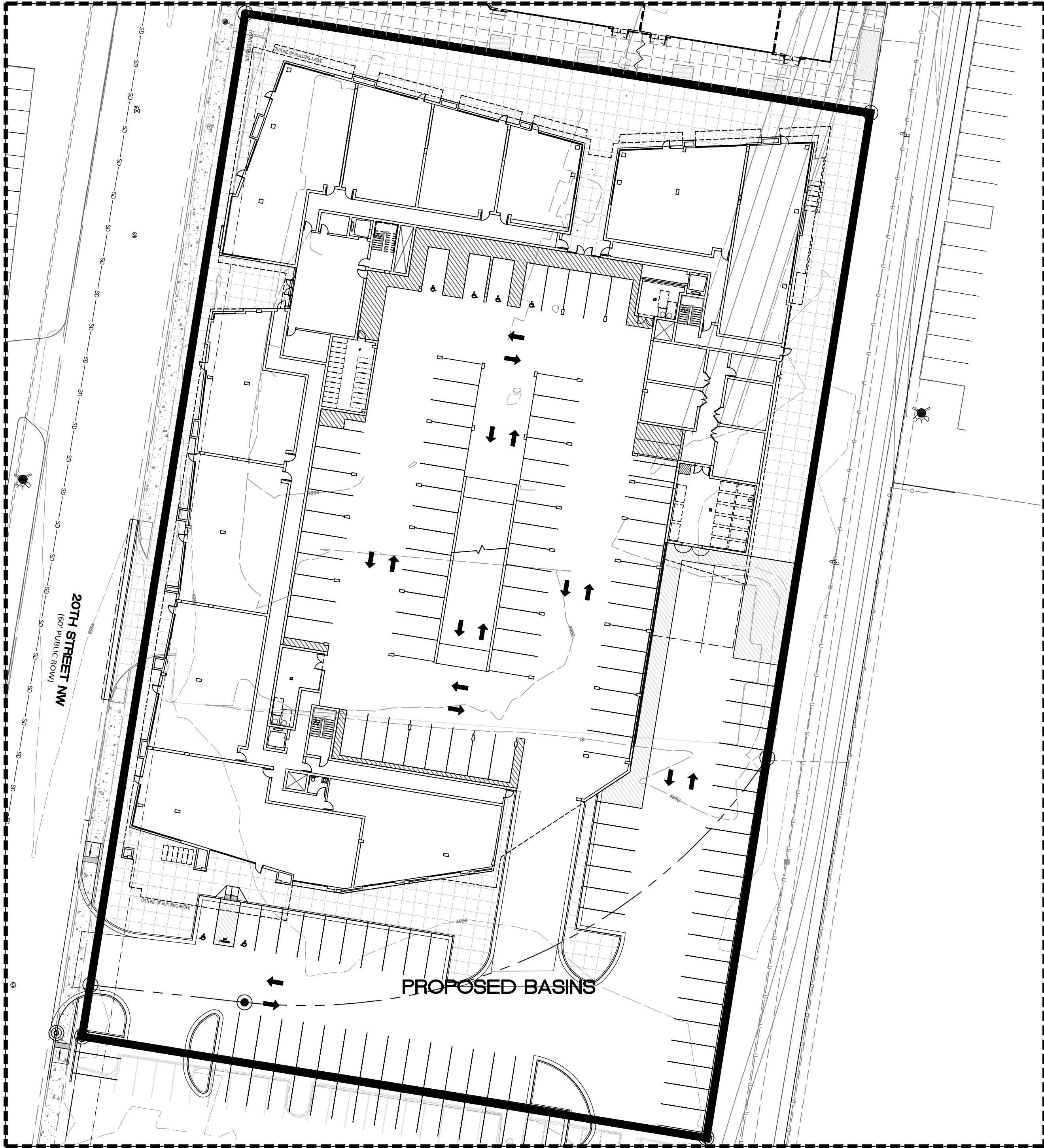
1. CONSTRUCT PEDESTRIAN WALKWAY AT ELEVATIONS SHOWN WITH CROSS SLOPES NO GREATER THAN 2%
2. CONSTRUCT 6" STANDARD CURB & GUTTER PER COA DWG #2415D
3. CONSTRUCT 8" STANDARD CURB & GUTTER PER COA DWG #2415D
4. CONSTRUCT ADA COMPLIANT RAMP AT 8.3% MAX AND 2% MAX CROSS SLOPE
5. CONSTRUCT ZERO FLUSH CURB & GUTTER AT ELEVATIONS SHOWN
6. REMOVE & REPLACE EXISTING ASPHALT PAVING PER COA STD DWG #2405B



GRAPHIC SCALE



| | | |
|---|--|--|
| ENGINEER'S SEAL RONALD R. BOHANNAN NEW MEXICO 7868 02-28-2023 RONALD R. BOHANNAN P.E. #7868 | 800 20TH ST ALBUQUERQUE, NM CONCEPTUAL GRADING PLAN TIERRA WEST, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com | DRAWN BY SB DATE 03-15-23 DRAWING SHEET # GR-1 JOB # 2022136 |
|---|--|--|



Weighted E Method

| Existing Basins | | | | | | | | | | | | | 100-Year | | | 10-Year | | |
|------------------|-----------|--------------|---------------|---------------|---------------|---------------|-----------------|----------------|----------|-----------------|----------------|----------|-----------------|----------------|----------|-----------------|----------------|----------|
| Basin | Area (sf) | Area (acres) | Treatment A % | Treatment B % | Treatment C % | Treatment D % | Weighted E (in) | Volume (ac-ft) | Flow cfs | Weighted E (in) | Volume (ac-ft) | Flow cfs | Weighted E (in) | Volume (ac-ft) | Flow cfs | Weighted E (in) | Volume (ac-ft) | Flow cfs |
| A | 89,475 | 2.05 | 0% | 15% | 0% | 85% | 2.101 | 0.360 | 8.30 | 1.329 | 0.227 | 5.02 | 0.360 | 8.30 | | | | |
| Developed Basins | | | | | | | | | | | | | 100-Year | | | 10-Year | | |
| Basin | Area (sf) | Area (acres) | Treatment A % | Treatment B % | Treatment C % | Treatment D % | Weighted E (in) | Volume (ac-ft) | Flow cfs | Weighted E (in) | Volume (ac-ft) | Flow cfs | Weighted E (in) | Volume (ac-ft) | Flow cfs | Weighted E (in) | Volume (ac-ft) | Flow cfs |
| 1 | 89,475 | 2.05 | 0% | 15% | 0% | 85% | 2.101 | 0.360 | 8.30 | 1.329 | 0.227 | 5.02 | 0.360 | 8.30 | | | | |

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

| Excess Precipitation, E (inches) | | | |
|----------------------------------|----------|-----------|--|
| Zone 2 | 100-Year | 10 - Year | |
| E _a | 0.62 | 0.15 | |
| E _b | 0.8 | 0.3 | |
| E _c | 1.03 | 0.48 | |
| E _d | 2.33 | 1.51 | |

| Peak Discharge (cfs/acre) | | | |
|---------------------------|----------|-----------|--|
| Zone 2 | 100-Year | 10 - Year | |
| Q _a | 1.71 | 0.41 | |
| Q _b | 2.36 | 0.95 | |
| Q _c | 3.05 | 1.59 | |
| Q _d | 4.34 | 2.71 | |

Water Quality Calculation: 0.26" x 3.73 ac = 3,520 cubic feet (0.081 ac-ft)

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 6/1/2023
BY: *[Signature]*
HydroTrans # J13D076B
THESE PLANS AND/OR REPORT ARE
CONCEPTUAL ONLY. MORE INFORMATION MAY
BE NEEDED IN THEM AND SUBMITTED TO
HYDROLOGY FOR BUILDING PERMIT APPROVAL.

| | | |
|---|---|------------------|
| <div>ENGINEER'S SEAL</div> <div>RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER</div> <div><i>[Signature]</i> 02-28-2023 RONALD R. BOHANNAN P.E. #7868</div> | 800 20TH ST ALBUQUERQUE, NM | DRAWN BY SB |
| | CONCEPTUAL DRAINAGE PLAN | DATE 03-15-23 |
| | | DRAWING |
| | | SHEET # GR-2 |
| | <div>Tierra West, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrowestllc.com</div> | JOB # 2022136 |