CITY OF ALBUQUERQUE

Timothy M. Keller, Mayor

April 18, 2018

Ronald Bohannan, P.E.
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM, 87109

RE: Pizza Hut – Coors Blvd & Avalon Rd
Grading and Drainage Plan
Engineer's Stamp Date: 04/14/18
Hydrology File: K10D020D

Dear Mr. Bohannan:

Based upon the information provided in your submittal received 04/12/2018, the Grading and Drainage Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

1. According to the latest Firm Map as you have indicated, this site is partially in Flood Zone AH. Please provide a written approval from FEMA prior to Hydrology approval.

2. Please provide Floodplain Permit prior to Hydrology approval.

3. Please fix the site location on the Vicinity Map. The existing Verlero gas station is highlighted.

4. Please show the two existing trees (see photo) and place a note that they will have to be removed.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Orig: Drainage File

CITY OF ALBUQUERQUE

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5. Please provide as-built spot elevations (top of wall and existing ground on either side of the wall) of the existing retaining wall.

6. Please add the provided volume in the first flush pond.

7. For Section A-A, please make these changes:

   a. Please add the property line.
   b. Please add the existing wall footer.
   c. Please provide the width of the existing retaining wall.
   d. It appears that the top of the existing pond next to retaining wall is 5085.70 and not 5087.70. This could be cleared up with the as-built topo shots in comment #5.
   e. Is the existing wall footer conflicting with the proposed pond? If so, than the pond will need to be adjusted.
   f. Is the wall stable after the existing earthwork excavation for the proposed pond? If not, then either provided for a new wall adjacent with the existing wall or shift the pond so it does not interfere with the existing wall.

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

Orig: Drainage File

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 3/2018)

Project Title: Pizza Hut Coors Blvd & Avalon Rd Building Permit #: _____ Hydrology File #: _____

DRB#: _____ EPC#: 17EPC-40053 Work Order#: _____

Legal Description: Tract D-3A Plat of Tracts D-1A, D-3A, D-4A, D-6 & D-7 Coors Central North

City Address: 303 Coors Blvd NW

Applicant: Alvarado Development LLC Contact: _____

Address: 924 W Colfax Ave Suite 302, Denver, CO 80204

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

Other Contact: Tierra West LLC Contact: Ron Bohannan

Address: 5571 Midway Park Pl NE, Albuquerque, NM 87109

Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: rrb@tierrawestllc.com

Check all that Apply:

IS THIS A RESUBMITTAL?: ____ Yes X No

DEPARTMENT:

X HYDROLOGY/ DRAINAGE

____ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION

____ PAD CERTIFICATION

____ CONCEPTUAL G & D PLAN

X GRADING PLAN

____ DRAINAGE MASTER PLAN

X DRAINAGE REPORT

____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC

____ ELEVATION CERTIFICATE

____ CLOMR/LOMR

____ TRAFFIC CIRCULATION LAYOUT (TCL)

____ TRAFFIC IMPACT STUDY (TIS)

____ OTHER (SPECIFY) _____

____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X 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: 04-12-2018 By: Vinny Perea

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE REPORT

For

Pizza Hut
Coors Blvd & Avalon Rd

Prepared by:

Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, New Mexico 87109

April 10, 2018

I certify that this report was prepared under my supervision, and I am a registered professional engineer in the State of New Mexico in good standing.

Ronald R. Bohannan
PE # 7868

Job No. 2017015

TABLE OF CONTENTS

Appendices

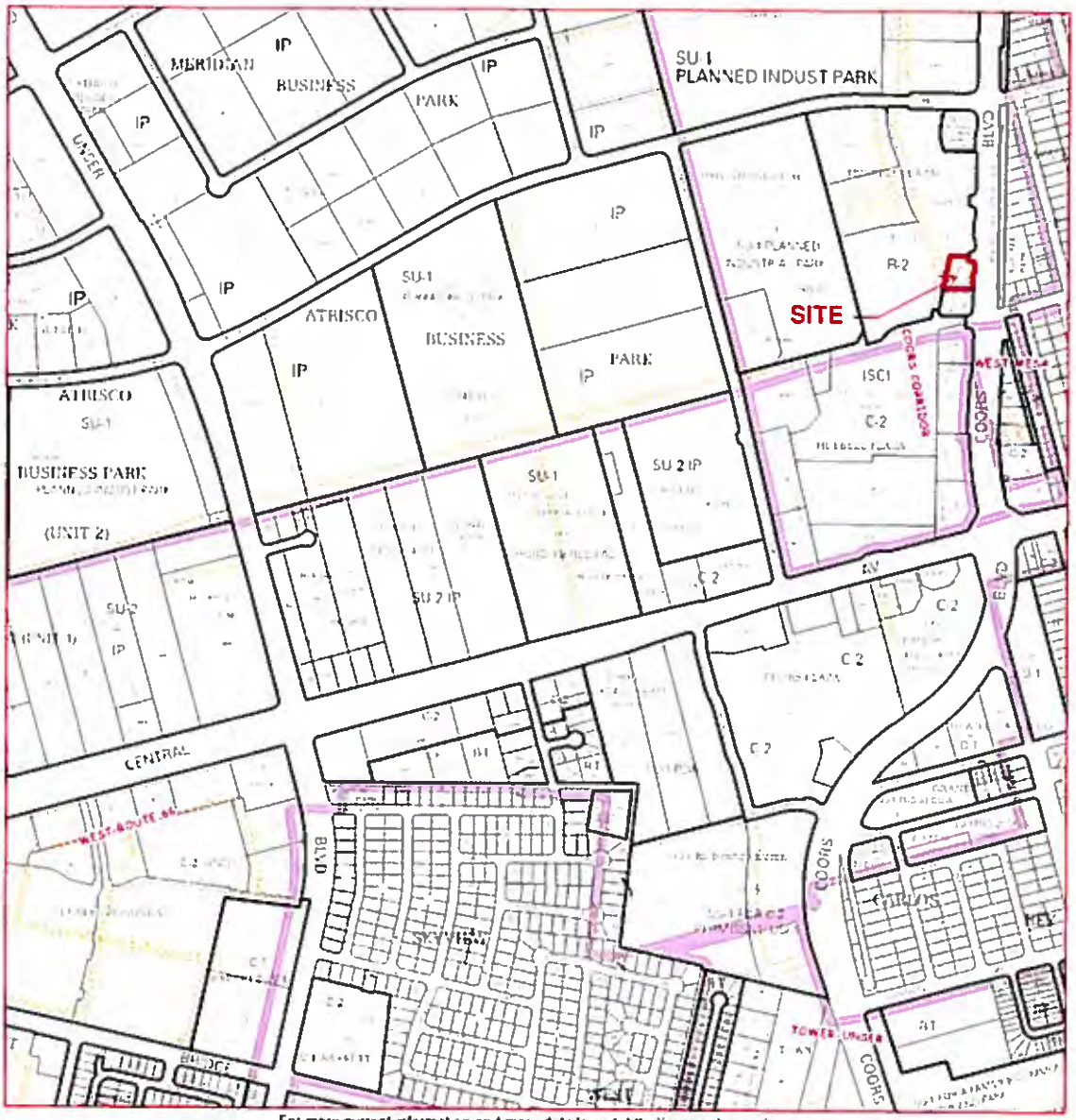
Purpose

The purpose of this report is to develop a Drainage Management Plan for developing a new commercial building for a Pizza Hut and retail tenant on an undeveloped 0.56-acre parcel of land, entitled Tract D-3A of the Coors Central North plat. The 0.56 acres will include an additional drainage inflow from the 0.55-acre developed parcel of land directly south of the site (Twisters property), giving a total of 1.11 acres of drainage area.

Location

The site is located on the northwest corner of the Coors Boulevard and Avalon Road intersection; it is bounded by Camino Azul to the west, Bluewater Village Apartments to the north, Coors Boulevard to the east, and Twisters to the south. The site consists of 1 commercial lot which will be developed for a single-story building with a drive-thru lane for a Pizza Hut and a tenant space for future commercial/retail use.

Exhibit A – Vicinity Map



For more current information and more details visit http://www.cabq.gov/gis

Exhibit B – Site Aerial Image

Existing Conditions

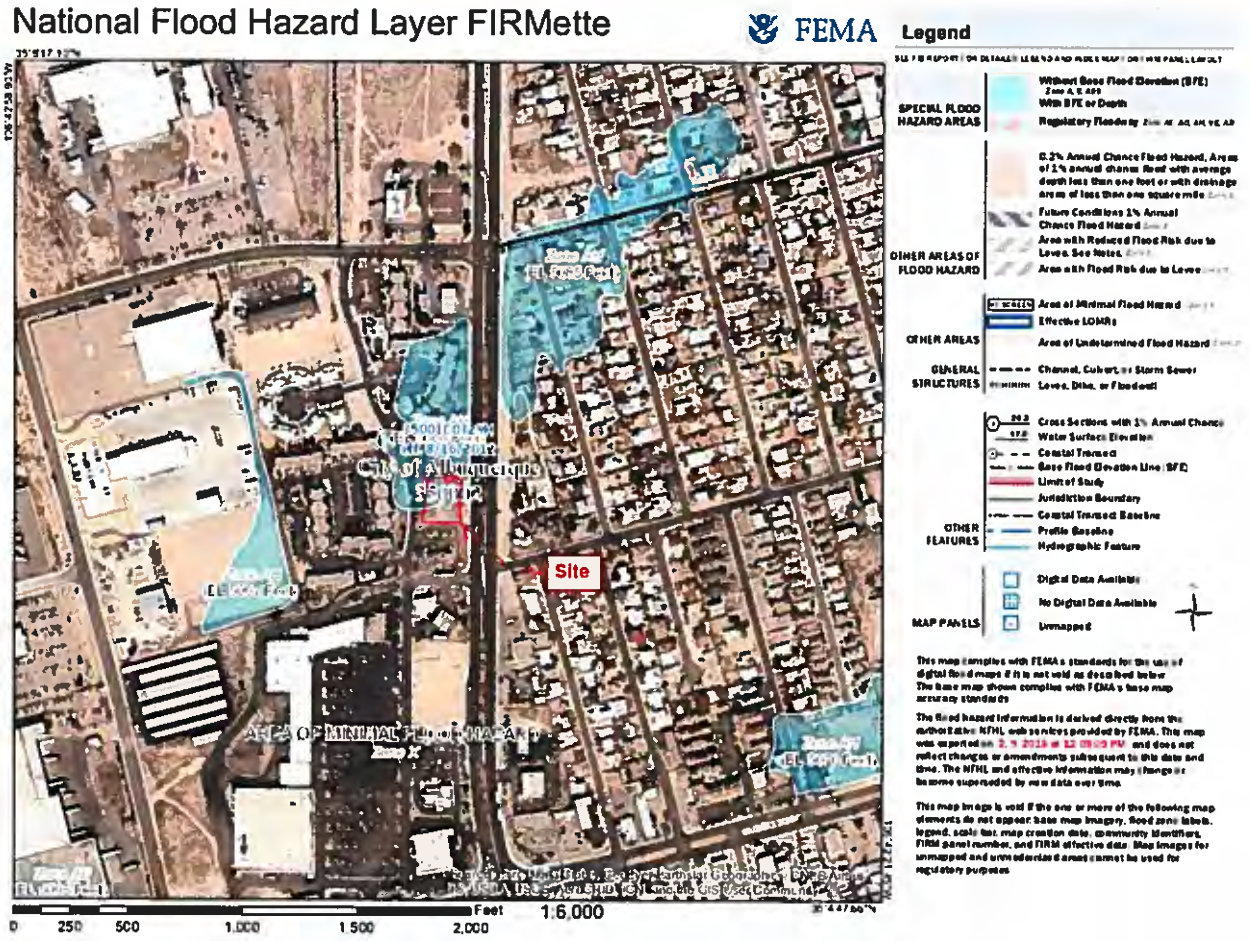
The site is undeveloped and drains from southeast to northwest with runoff retained onsite. The site currently consists of two drainage basins, E1 and E2. Basin E1 consists of the Twisters developed property directly south of the site. Runoff flows from E1 are directed north towards the site where the flows are retained.

Basin E2 consists of the entire undeveloped subject site. The undeveloped site has a slight grade to direct flows to the northwest but is retained onsite currently. The total 100-yr storm runoff for both basins is 3.09 cfs. The hydrology calculations/table and existing basin map can be found in Appendix A.

Flood Plain

The site is located on FIRM Map 35001C0329H. The map indicates that the site partially lies within Flood Zone AH with a water surface elevation of 5088 ft. The finished floor elevation of the proposed building will be at an elevation of 5089.25 ft, therefore the building will not require mandatory flood insurance.

Exhibit C – FIRM Map



Proposed Conditions

All improvements will be built out in their entirety. The grading and drainage design is configured to accommodate the proposed building and associated improvements plus the drainage of the Twisters property to the south.

Basin P1 consists of the entire Twister property, runoff will be directed towards the north towards the subject site via surface flow through the new drive aisle at the SE corner of the site and through a landscaped buffer and curb cuts along the southern onsite parking row. Total flow rate from this basin is 1.88 cfs.

Basin P2 consists of the southern portion of the site as well as the southern half of the building roof and drive through lane. Flows from this basin accept the flows from Basin P1 and are directed northwest via surface flow and curb cut towards the landscaped ponding area along the western and northern property line. Total flow rate from this basin is 1.02 cfs.

Basin P3 consists of the parking area and landscaped buffer directly east of the building. Flows from this basin are directed north via surface flow and a curb cut towards the landscaped ponding area along the western and northern property line. Total flow rate from this basin is 0.68 cfs.

Basin P4 consists of the norther half of the building roof as well as a portion of the drive through lane. Flows from this basin are directed west via surface flow towards a curb cut that enter the landscaped ponding area along the western and northern property line. Total flow rate from this basin is 0.23 cfs.

Basin P5 consists of a small portion of the drive through lane directly northwest of the proposed building. These flows are directed northwest via surface flow and curb cut and into the landscaped ponding area. Total flow rate from this basin is 0.06 cfs.

Basin P6 consists of the entire landscaped ponding area along the north and west property line. This basin accepts flows from all the developed basins for this development. Total flow rate for this basin is 0.2 cfs. The landscape ponding area is intended to retain the "first flush" volume of the developed site prior to discharging into

the existing pond directly west and north the site. A weir will be constructed in the existing retaining wall that is on the west property line so that the remaining runoff flow (less the first flush volume) will topple over the wall and into the existing pond. Calculations for the size and capacity of the weir can found in Appendix B along with calculations for the curb cut capacity.

The total developed flow rate through the weir and into the existing pond north and west of the site is 4.07 cfs. An existing master drainage plan for this area titled "Bluewater Development Hydrology Report" by Red Mountain Engineers 12/4/1996 (K10-D20) shows that our site plus the Twisters site (formerly Arby's) can discharge into this existing pond at a rate of 5.8 cfs, which we fall under. Excerpts of this drainage report can be found in Appendix C.

Water Quality Management

The management of water quality for this site intends to capture the 99th percentile storm event and retain onsite prior to any discharge off of the site. This volume was calculated per the COA drainage ordinance as 0.44" (minus initial abstractions) over the developed impervious areas, giving a total of 885.7 cubic feet of runoff to retain. The water quality will be retained in the landscaped ponding area along the west and north property lines. The weir that will be cut into the existing retaining wall will act as a raised invert of the pond at a height that will retain the required 885.7 cubic feet volume. The water quality volume calculations can be found on the hydrology table in Appendix A.

Calculations

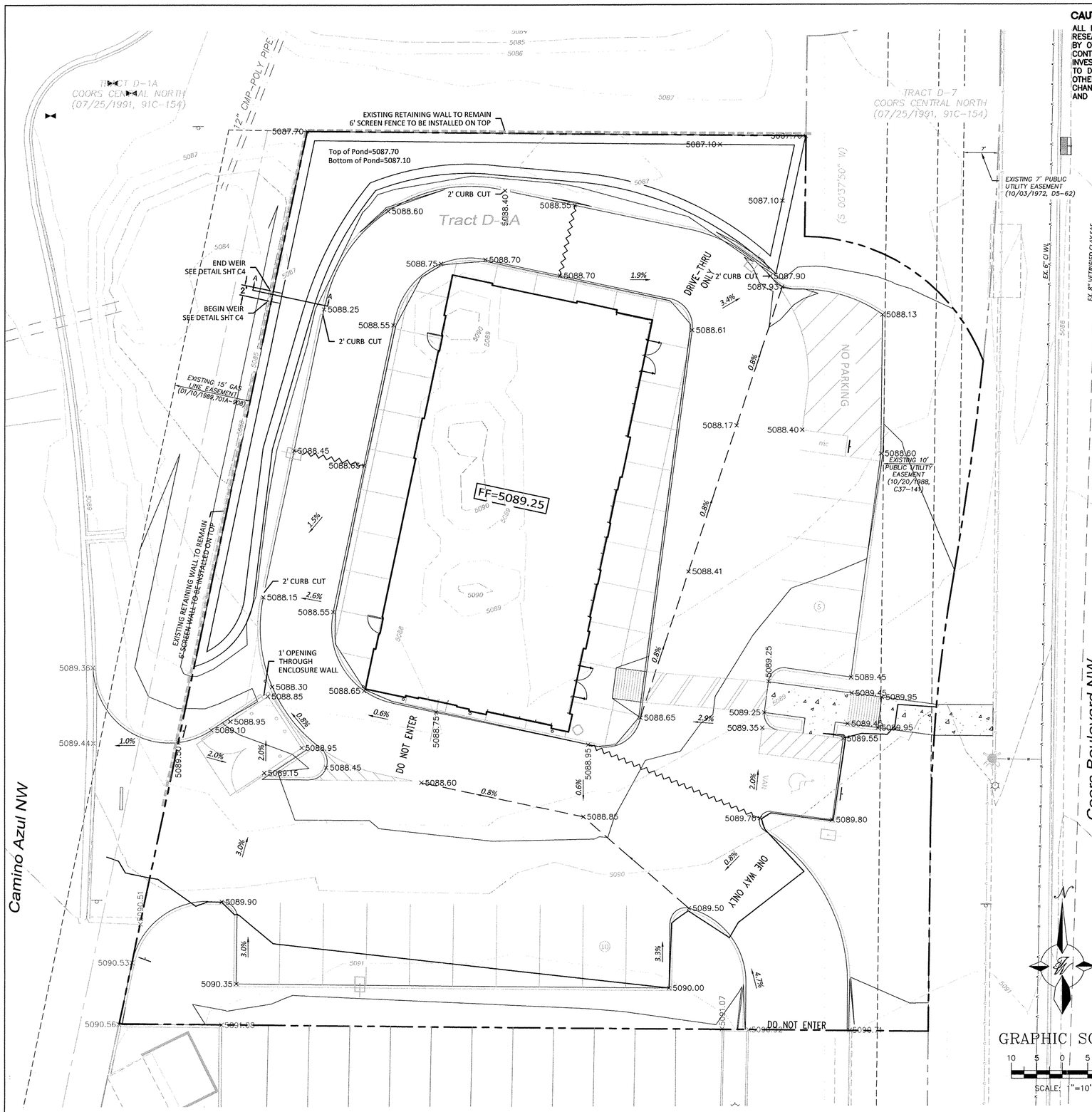
The Weighted E Method from the "City of Albuquerque Development Process Manual Volume I – Design Criteria, 2006 Revision" was used to calculate the runoff and volume for the site, the hydrology table can be found in Appendix A. Drainage capacities for the weir and curb cuts can be found in Appendix B.

Summary

The entire site will be graded and all of the surface improvements will be built out in their entirety. The enclosed grading plan shows the grades for the entire project.

The proposed development consists of commercial development with 6 basins that includes accepting drainage from the Twisters property directly to the south. All of the basins will convey flow via surface flow and through curb cuts towards the proposed onsite landscaped ponding area along the west and north property lines.

The landscaped ponding area will include a raised invert weir that will retain the required first flush volume prior to any discharge from the site. The developed discharge will flow over the weir and into an existing pond just north and west of the subject site. The flow rate entering this pond through the weir will be 4.07 cfs which is less than the 5.8 cfs requirement outlined in the "Bluewater Development Hydrology Report".



CAUTION:

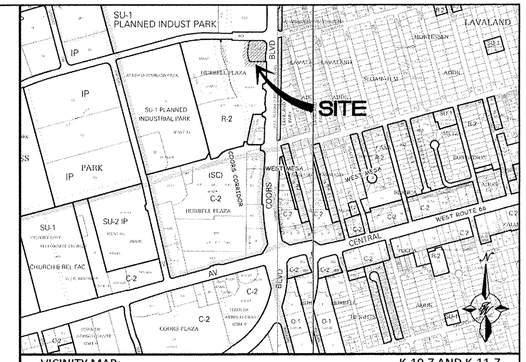
ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND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

LEGEND

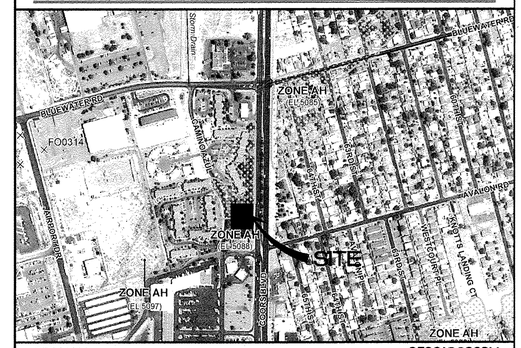
- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- BUILDING
- SIDEWALK
- SCREEN FENCE, 6' HEIGHT
- RETAINING WALL
- 5010 CONTOUR MAJOR
- 5011 CONTOUR MINOR
- x 5048.25 SPOT ELEVATION
- FLOW ARROW
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- 5010 EXISTING CONTOUR MAJOR
- 5011 EXISTING CONTOUR MINOR
- x 5048.25 EXISTING SPOT ELEVATION

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 ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: K-10-Z AND K-11-Z

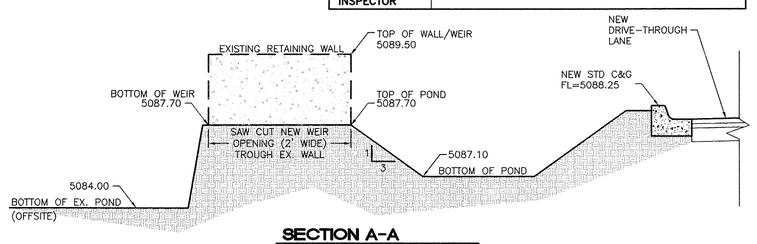


FIRM MAP: 35001C0329H

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 HERON, 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 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
INSPECTOR	



SECTION A-A

NOT TO SCALE

ENGINEER'S SEAL

RONALD R BOHANNAN NEW MEXICO 7868 REGISTERED PROFESSIONAL ENGINEER

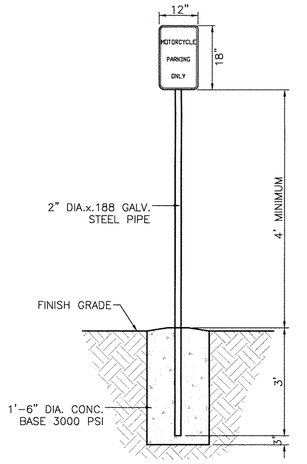
RONALD R. BOHANNAN
P.E. #7868

PIZZA HUT
HUBBEL PLAZA

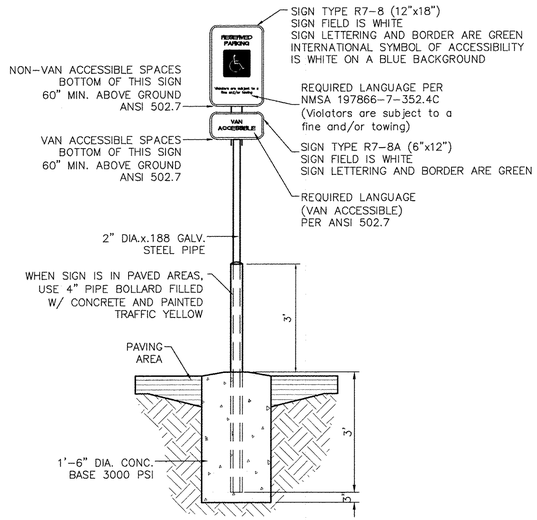
GRADING/DRAINAGE PLAN FOR BUILDING PERMIT

TIERRA WEST, LLC
5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NM 87109
(505) 858-3100
www.tierrawestllc.com

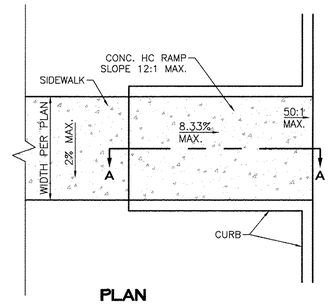
DRAWN BY: DY
DATE: 4/4/2018
2017015-GRE
SHEET #: C2
JOB #: 2017015



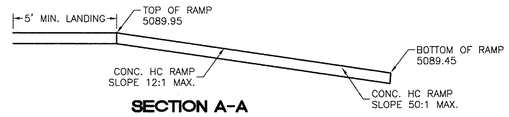
MOTORCYCLE PARKING SIGN
NTS



ACCESSIBLE PARKING SIGN
NTS



PLAN

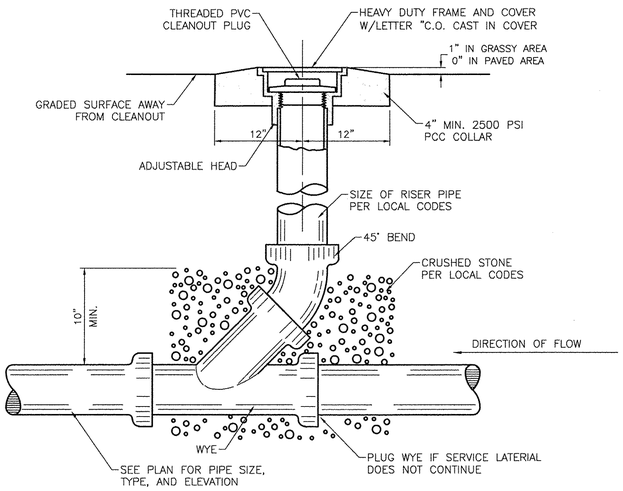


SECTION A-A

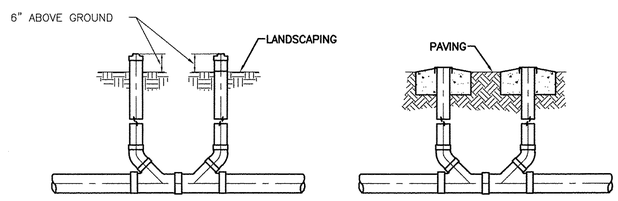
NOTES:

1. THE SURFACE OF RAMP AND SIDES SHALL HAVE A TRANSVERSE BROOMED SURFACE TEXTURE ROUGHER THAN THE SURROUNDING SIDEWALK.
2. RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO THE TOP OF THE RAMP.
3. CONSTRUCT PER A.D.A. STANDARDS.

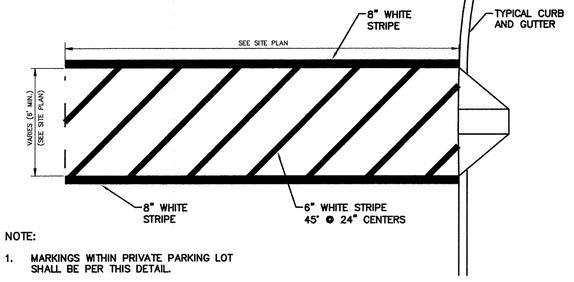
UNIDIRECTIONAL HC RAMP
NOT TO SCALE



SANITARY SEWER CLEAN-OUT
NTS



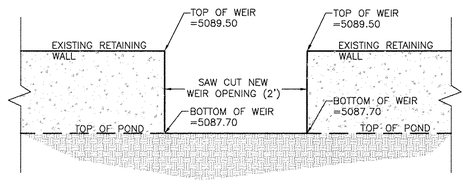
SANITARY SEWER DOUBLE CLEAN-OUTS
NTS



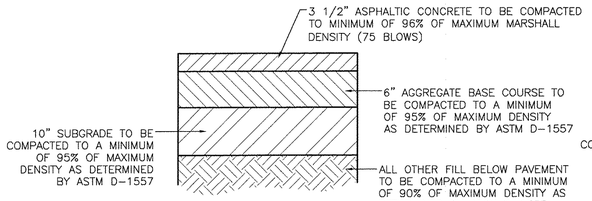
NOTE:

1. MARKINGS WITHIN PRIVATE PARKING LOT SHALL BE PER THIS DETAIL.
2. THESE MARKINGS ARE TO BE PAINTED REFLECTIVE WHITE.

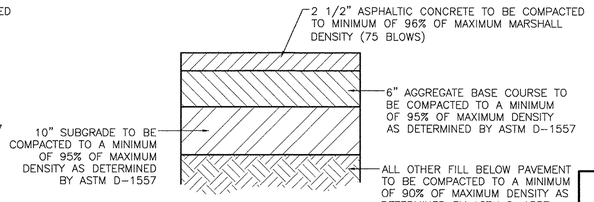
CROSSWALK/PED. CROSSING
NTS



WEIR DETAIL
NOT TO SCALE



TRUCK ACCESS + DRIVING AREAS TYPICAL PAVING SECTION



PARKING AREAS TYPICAL PAVING SECTION

ENGINEER'S SEAL

RONALD R. BOHANNAN NEW MEXICO 7868 REGISTERED PROFESSIONAL ENGINEER

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