

# CITY OF ALBUQUERQUE

*Planning Department*  
Brennon Williams, Director



*Mayor Timothy M. Keller*

February 19, 2021

Richard Dourte, P.E.  
RHD Engineering LLC  
4305 Purple Sage Ave. NW  
Albuquerque, New Mexico 87120

**RE: Community Baptist Church  
3030 Todos Santos NW  
Grading and Drainage Plan  
Engineers Stamp Date; 3/6/2020 (G10D029J)  
Certification Date; 2/10/2021**

Mr. Dourte,

PO Box 1293

Based upon the information provided in your submittal received 2/16/2021 and site visit on 2/19/2021, this plan is approved for Certificate of Occupancy release.

Albuquerque

If you have any questions, please contact me at 924-3986 or [earmijo@cabq.gov](mailto:earmijo@cabq.gov).

Sincerely,

NM 87103

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

[www.cabq.gov](http://www.cabq.gov)



# City of Albuquerque

Planning Department  
Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

**Project Title:** Community Baptist Church Building Permit #: \_\_\_\_\_ Hydrology File #: \_\_\_\_\_

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: Lot 3, Volcano Business Park

City Address: 303 Todo Santos St. NW

**Applicant:** RHD Engineering, LLC Contact: Richard Dourte

Address: 4305 Purple Sage Ave. NW, Alb. NM, 87120

Phone#: 505.288.1621 Fax#: \_\_\_\_\_ E-mail: rhengineering@outlook.com

**Other Contact:** Simons Architecture PC Contact: Joe Simons

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: joe@simonsarchitecture.com

**TYPE OF DEVELOPMENT:** \_\_\_\_\_ PLAT (# of lots) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL? \_\_\_\_\_ Yes ☒ No

**DEPARTMENT** \_\_\_\_\_ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

**TYPE OF SUBMITTAL:**

- ☒ ENGINEER/ARCHITECT CERTIFICATION  
☐ PAD CERTIFICATION  
☐ 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  
☐ 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: Feb. 10, 2021 By: Richard Dourte

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_



DRAINAGE NARRATIVE:

1. THE MASTER DRAINAGE PLAN FOR THIS AREA ALLOTS 0.43CFS PER ACRE DISCHARGE TO THE REAR OF THE LOT. THE EASTERNMOST 40' OF THIS LOT CONTAINS A DRAINAGE EASEMENT FOR THIS DISCHARGE. THE SITE IS 1.01ac, THUS THE SITE IS PERMITTED 0.43x1.01=0.43CFS DISCHARGE. THE PEAK DISCHARGE IS 0.393CFS (REFER TO SHEET 14 OF 15 - APPENDIX A).
2. THE STORM WATER QUALITY DISCHARGE REQUIREMENT IS 860CF, THE STORM WATER QUALITY POND PROVIDED IS 908CF, THE THE POND PROVIDED IS GREATER THAN THAT REQUIRED.
3. THE OUTFALL FOR THIS SITE WILL BE VIA A PIPE, THUS  $Q=C\sqrt{H}$ , WHERE  $Q=0.43CFS$ ,  $C=0.60$ ,  $G=32.2FT/S^2$ ,  $H=2.0FT$ , THUS  $A=0.0619SF$  OR  $D=3.4"$ , USE A 4" PIPE.
4. THE MAXIMUM WSE FOR THIS DISCHARGE FOR THIS SITE IS 31.75 (REFER TO SHEET 15 OF 15 - APPENDIX A).
5. APPENDIX A CONTAINS THE COMPUTATIONS FOR THE STORMWATER DISCHARGE WITH RESPECT TO THIS SITE.

GENERAL NOTES:

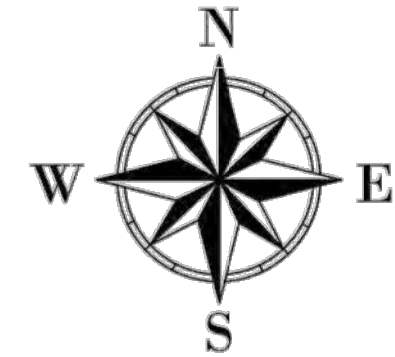
1. THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0326J, EXCERPT ATTACHED).
2. RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.
3. SLOPE STABILIZATION SHALL BE USED ON SLOPES GREATER THAN A 3:1 SLOPE, PER MANUFACTURER RECOMMENDATIONS.
4. MODIFICATIONS OR ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES/EROSION MITIGATION IMPROVEMENTS SHALL BE DONE IN THE SAME MANNER AS THE ORIGINAL IMPROVEMENT.
5. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.
6. ALL WORK ON THIS PLAN SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS. ALL APPLICABLE PERMITS SHALL BE OBTAINED PRIOR TO WORK COMMENCING.
7. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.
8. THIS GRADING PLAN IS TO BE UTILIZED AND A COPY PROVIDED TO THE CITY WHEN APPLYING FOR THE CONSTRUCTION OF ANY GARDEN OR RETAINING WALLS, WITH RESPECT TO THIS SITE.
9. THE SURVEY INFORMATION WAS PROVIDED BYCONSTRUCTION SURVEYS TECHNOLOGIES, INC.
10. FOR SITE DIMENSIONS, BUILDING AND INFRASTRUCTURE LOCATION REFER TO THE SITE PLAN.
11. DO NOT PLACE ADDITIONAL FILL OR LOADING ON ADJACENT WALLS WITHOUT APPROVAL OF A STRUCTURAL ENGINEER. CONTACT A STRUCTURAL ENGINEER FOR ADEQUACY OF THE EXISTING PERIMETER WALLS W/RESPECT TO THIS GRADING PLAN.

EROSION CONTROL NOTES:

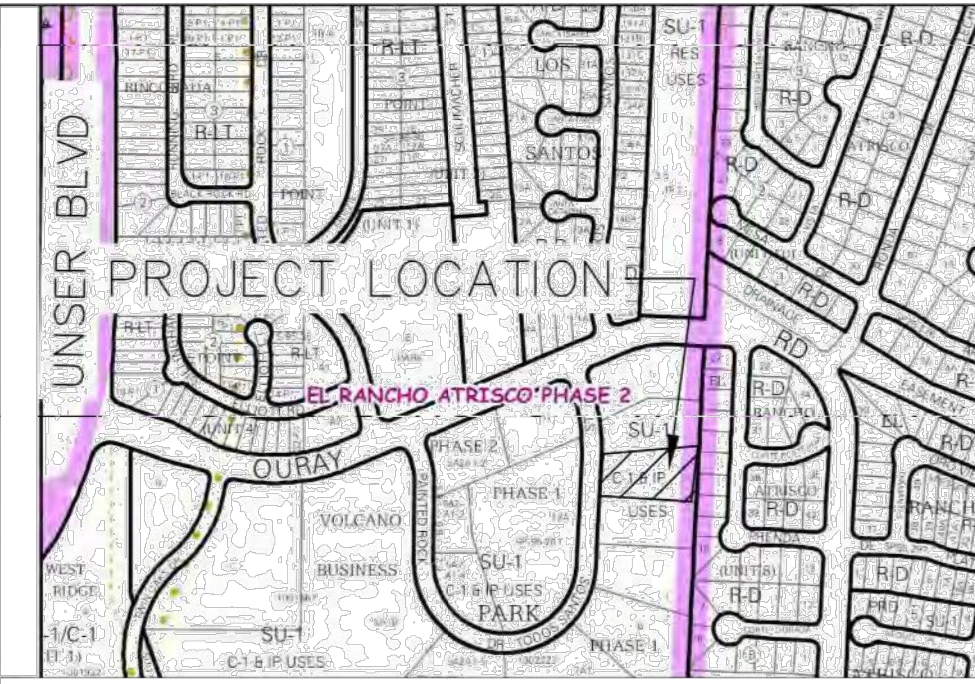
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES 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.

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



Scale 1" = 30'



VICINITY MAP: G-10-Z



FIRM MAP: 35001C0326J

LEGAL DESCRIPTION:

LOT 3, VOLCANO BUSINESS PARK  
CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. RETAIN THE FIRST 34" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQUIREMENTS

LEGEND

- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR EXISTING
- INDEX CONTOUR PROPOSED
- CONTOUR PROPOSED INDEX
- CONTOUR
- LOT LINE
- EXISTING WALL
- EXISTING CURB AND GUTTER
- PROPOSED RETAINING WALL
- PROPOSED WALL
- PROPOSED EDGE OF CONCRETE
- PROPOSED FLOWLINE (.5'± SWALE)
- PROPOSED BASIN BOUNDARY
- 6" DEEP - 3" CLEAN COBBLE STONE W/FILTER FABRIC
- PEDESTRIAN FENCE-42" MIN.

I HAVE PERSONALLY INSPECTED THE PROPERTY ON 1-3-20. NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE TOPO SHOWN.

Richard Dourte P.E. #10854 DATE

|                 |  |          |
|-----------------|--|----------|
| ENGINEER'S SEAL | Title:<br>COMMUNITY BAPTIST CHURCH<br>3030 TODOS SANTOS NW | DRAWN BY |
|                 | GRADING AND DRAINAGE PLAN                                  | DATE     |
|                 |  | DATE     |
|                 |  | SHEET #  |
|                 |  | 1 of 1   |
|                 |  | JOB #    |

| Project: Community Baptist Church - 3030 Todos Santos NW<br>Drainage Calculations - Zone 1 |      |      |       |        |
|--|------|------|-------|--------|
| Depth (inches) at 100yr Storm  |      |      |       |        |
| Zone   | P60  | P300 | P1440 | P1days |
| 1  | 1.87 | 2.20 | 2.66  | 3.12   |
| 2  | 2.01 | 2.35 | 2.75  | 3.30   |
| 3  | 2.14 | 2.60 | 3.10  | 3.95   |
| 4  | 2.23 | 2.90 | 3.65  | 4.70   |

Weighted E= ((E<sub>1</sub>\*A<sub>1</sub>)+(E<sub>2</sub>\*A<sub>2</sub>)+(E<sub>3</sub>\*A<sub>3</sub>)+(E<sub>4</sub>\*A<sub>4</sub>))/(A<sub>1</sub>+A<sub>2</sub>+A<sub>3</sub>+A<sub>4</sub>)  
V<sub>300</sub>=Weighted E \*P<sub>300</sub>/12 in/ft  
V<sub>1440</sub>=V<sub>300</sub>+A<sub>0</sub>\*(P<sub>1440</sub>-P<sub>300</sub>)/12in/ft  
V<sub>days</sub>=V<sub>300</sub>+A<sub>0</sub>\*(P<sub>days</sub>-P<sub>300</sub>)/12in/ft  
V<sub>10days</sub>=V<sub>300</sub>+A<sub>0</sub>\*(P<sub>10days</sub>-P<sub>300</sub>)/12in/ft

| Excess Precipitation, E(inches) - 6 HR<br>Treatment |      |      |      |      |
|---|------|------|------|------|
| Zone  | A    | B    | C    | D    |
| 1   | 0.44 | 0.67 | 0.99 | 1.97 |
| 2   | 0.53 | 0.78 | 1.13 | 2.12 |
| 3   | 0.66 | 0.92 | 1.29 | 2.36 |
| 4   | 0.80 | 1.08 | 1.46 | 2.64 |

| Peak Discharge (CFS/ACRE) 100 YR<br>Treatment |      |      |      |      |
|---|------|------|------|------|
| Zone  | A    | B    | C    | D    |
| 1   | 1.29 | 2.03 | 2.87 | 4.37 |
| 2   | 1.56 | 2.28 | 3.14 | 4.70 |
| 3   | 1.87 | 2.60 | 3.45 | 5.02 |
| 4   | 2.20 | 2.92 | 3.73 | 5.25 |

| *****EXISTING CONDITIONS***** |        |       |         |  |
|-------------------------------|--------|-------|---------|--|
| Area                          | SQ. FT | Acres | % Total |  |
| A=                            | 0      | 0.000 | 0%      |  |
| B=                            | 43780  | 1.005 | 100%    |  |
| C=                            | 0      | 0.000 | 0%      |  |
| D=                            | 0      | 0.000 | 0%      |  |
| Total                         | 43780  | 1.005 | 100%    |  |
| Weighted E=                   |        | 0.670 |         |  |

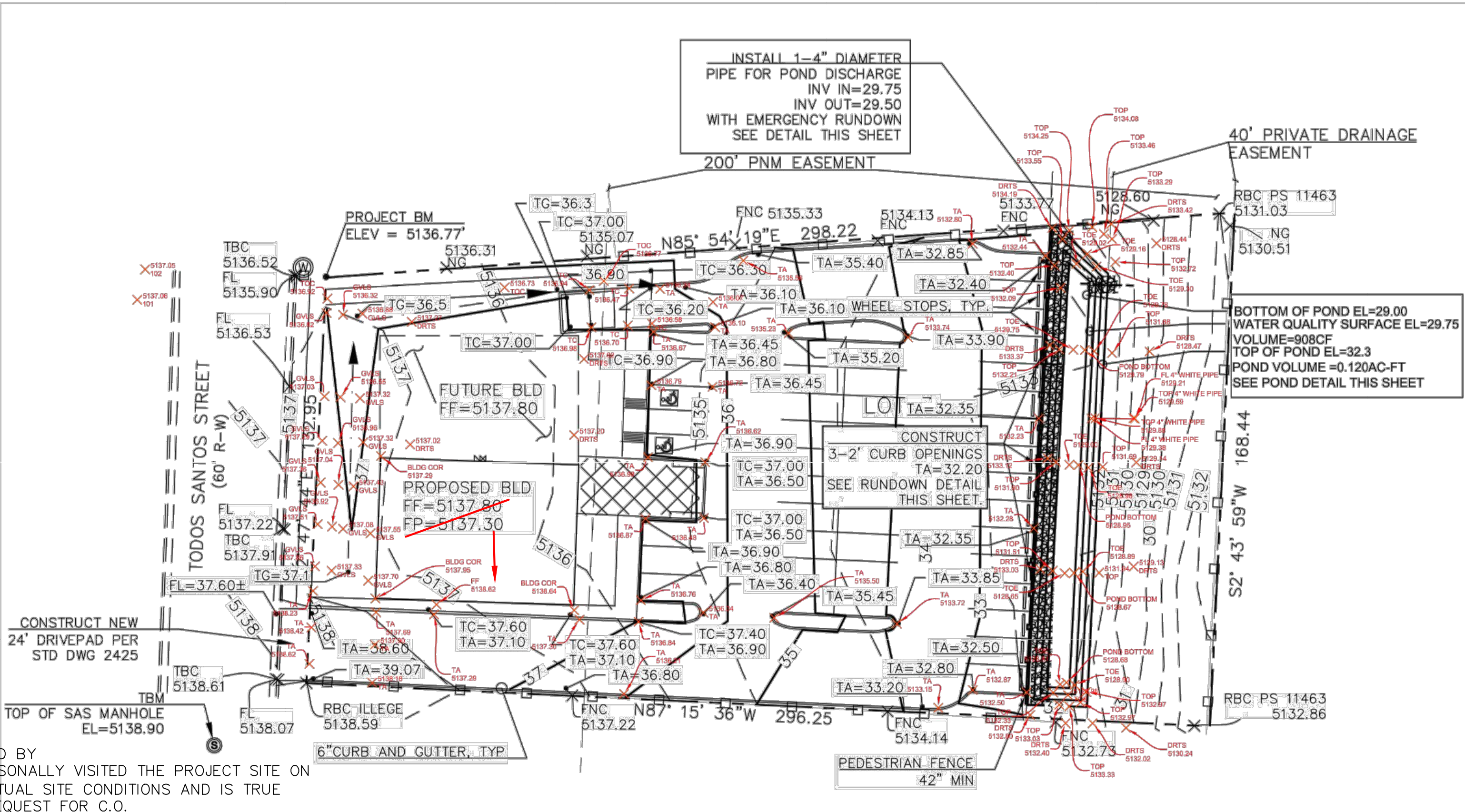
|            | V <sub>300</sub> | V <sub>1440</sub> | V <sub>days</sub> | V <sub>10days</sub> |
|------------|------------------|-------------------|-------------------|---------------------|
| Cubic feet | 2444             | 2444              | 2444              | 2444                |
| Acre-ft    | 0.06             | 0.06              | 0.06              | 0.06                |

| *****PROPOSED CONDITIONS***** |        |       |         |  |
|-------------------------------|--------|-------|---------|--|
| Area                          | SQ. FT | Acres | % Total |  |
| A=                            | 0      | 0.000 | 0%      |  |
| B=                            | 0      | 0.000 | 0%      |  |
| C=                            | 13417  | 0.308 | 31%     |  |
| D=                            | 30363  | 0.697 | 69%     |  |
| Total                         | 43780  | 1.005 | 100%    |  |
| Weighted E=                   |        | 1.670 |         |  |

|            | V <sub>300</sub> | V <sub>1440</sub> | V <sub>days</sub> | V <sub>10days</sub> |
|------------|------------------|-------------------|-------------------|---------------------|
| Cubic feet | 6091             | 7255              | 8419              | 9811                |
| Acre-ft    | 0.14             | 0.17              | 0.19              | 0.23                |

The 100 year peak flows for this developed site is 3.9 CFS and the existing flows are 2 CFS for an increase of 1.9 CFS. The 100 year 6 hr volume increase is 6091-2444 = 3647CF.

Storm Water Quality Ponding Requirement = A<sub>0</sub> \*0.34 in/12in/ft = 860 CF



TEMPORARY BENCH MARK  
1-NW PROPERTY CORNER EL=5136.77  
2-EXISTING SAS MANHOLE EL=5138.90

SURVEYOR'S CERTIFICATE:

I, DAVID P. ACOSTA, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21082, DO HEREBY CERTIFY THAT THIS AS-BUILT SURVEY WAS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

DAVID P. ACOSTA  
NEW MEXICO  
PROFESSIONAL SURVEYOR  
21082

02-10-21  
DATE

DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR DRAINAGE CERTIFICATION  
I, Richard Dourte, NMPE 10854 OF THE FIRM RHD Engineering, LLC HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 3/06/20. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENTATION HAS BEEN OBTAINED BY David Acosta, NMPS 21082 OF THE FIRM Construction Survey Technologies, Inc. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 2/10/21 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF THE REQUEST FOR C.O.  
(DESCRIBE ANY EXCEPTIONS AND /OR QUALIFICATIONS HERE IN A SEPARATE PARAGRAPH.)  
1. The changes are marked in red.  
2.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENTATION ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

