

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

October 10, 2018

Fred Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM 87108

**RE: Industrial Water Engineering
8701 Alameda Park Dr NE
Request for Certificate of Occupancy - Permanent
Hydrology Final Inspection - Approved
Engineer's Stamp Date 12/13/17 (C16D006LL)
Certification Dated: 10/5/18**

Dear Mr. Arfman:

PO Box 1293

Based on the submittal received on 10/5/18, this certification is approved in support of Permanent Certificate of Occupancy.

Albuquerque

If you have any questions, you can contact me at 924-3695 or dpeterson@cabq.gov.

NM 87103

Sincerely,

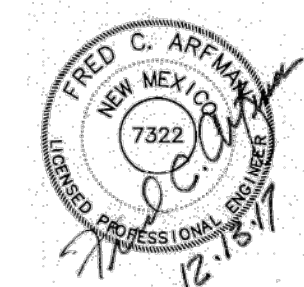
www.cabq.gov

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development and Review Services

C: Email Fox, Debi; Tena, Victoria; Sandoval, Darlene; Costilla, Michelle

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7601 JEFFERSON NE, SUITE 101
ALBUQUERQUE, NM 87109
505.761.9700 / DPSDESIGN.ORG



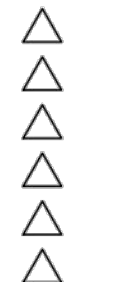
SEAL

PROJECT

Industrial Water Engineering
8701 Alameda Park Drive NE
Albuquerque, NM 87113

100%
CONSTRUCTION
DOCUMENTS

REVISIONS



DRAWN BY

REVIEWED BY

DATE

PROJECT NO.

DRAWING NAME

GRADING &
DRAINAGE PLAN

SHEET NO.

CG-101

OF

GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS, PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT, WHERE APPLICABLE, CITY OF ALBUQUERQUE AND NMDOT STANDARDS APPLY.
- CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA.
- ALL SUBGRADE, OVEREXCAVATION, BACKFILL, AND FILL SHALL BE PLACED AND / OR COMPACTED PER THE GEOTECHNICAL REPORT AND CITY OF ALBUQUERQUE SPECIFICATIONS.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION, OR PRIOR TO OCCUPANCY, AS APPROPRIATE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE ARCHITECT AND VERIFY THE ARCHITECT'S INTENT BEFORE PROCEEDING.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY.
- CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON SITE.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT UNLESS NOTED ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS. EQUIPMENT SHALL ONLY OBSTRUCT DESIGNATED TRAFFIC LANES IF APPROPRIATE BARRICADING PERMITS HAVE BEEN OBTAINED.
- CONTRACTOR SHALL PROVIDE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN THAT CONFORMS TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN BARRICADING PERMITS FROM THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING EACH DAY.
- PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. FOR ALL ACCESSIBLE ROUTES, MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%.
- ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, FINISH FLOOR OF BUILDING, TOP OF LANDSCAPE MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- NOTE: TO ENSURE READABILITY, NOT ALL PAVEMENT SPOT ELEVATIONS SHOW ADJACENT TOP OF CURB / TOP OF WALK. TEXT SHOWN WITH FLOWLINE REPRESENTS FLOWLINE ELEVATION. ADD 0.5' TYPICAL FOR TOP OF ADJACENT CURB OR WALK ELEVATIONS.
- IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT.
- EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO EXCAVATING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.
- CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS AT CONTRACTOR'S SOLE EXPENSE. PROPERTY CORNERS SHALL ONLY BE RESET BY A REGISTERED LAND SURVEYOR.
- A CURRENT STORMWATER CONTROL PERMIT, INCLUDING AN EROSION SEDIMENT CONTROL PLAN (E.S.C.) IS REQUIRED FOR ALL CONSTRUCTION, DEMOLITION CLEARING, AND GRADING OPERATIONS THAT DISTURB THE SOIL ON ONE ACRE OR MORE OF LAND. OWNER WILL COORDINATE.
- POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER.
- ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
- PAVING AND ROADWAY GRADES SHALL BE $\pm 0.1'$ FROM PLAN ELEVATIONS. BUILDING FINISH FLOOR ELEVATION SHALL BE $\pm 0.05'$ FROM PLAN ELEVATION.
- WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.
- ALL EROSION CONTROL TO BE ANGULAR ROCK (F.F. ROCK) DEFINED AS 6" DEEP X 3" AVG. DIA. ANGULAR FACED ROCK PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.). SIDESLOPES STEEPER THAN 3:1 BUT LESS THAN 2:1 MUST HAVE PERMANENT EROSION CONTROL (F.F. ROCK O.E.) INSTALLED, TYPICAL. NO SLOPE SHALL BE STEEPER THAN 2:1.
- ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
- DEPRESS LANDSCAPING FOR WATER HARVESTING. NOTE: NO WATER HARVESTING SHALL OCCUR WITHIN 10' OF BUILDING.

CONSTRUCTION STAKING

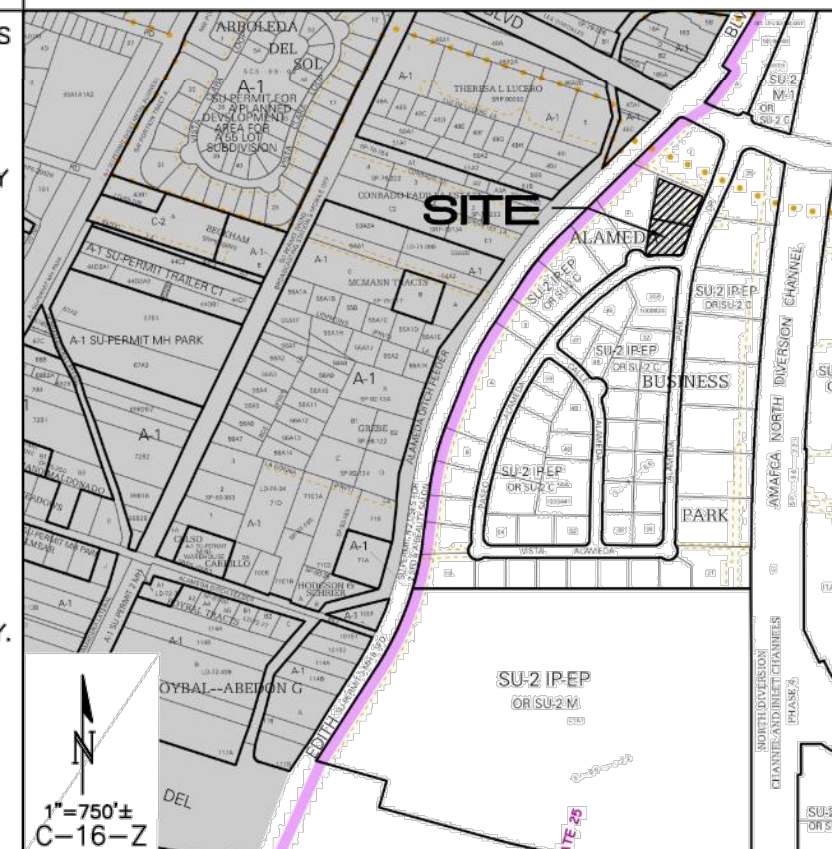
UPON WRITTEN REQUEST COORDINATED THROUGH THE PROJECT ARCHITECT, THE EXISTING R.F. OF TOP OF GRADE AND DRAINAGE WILL BE PROVIDED TO THE CONTRACTOR FOR VERTICAL CONTROL. DO NOT USE THIS PLAN FOR PROJECT STAKING.

SITE CONSTRUCTION LAYOUT / STAKING SHALL BE COORDINATED WITH THE ARCHITECT USING THE ARCHITECT PROVIDED SITE PLAN.

LEGEND

- +4965.83— EXISTING SPOT ELEVATION
- 78— EXISTING CONTOUR
- 78.3— PROPOSED CONTOUR
- ◆ 78.3 PROPOSED SPOT ELEVATION
- FLOW ARROW
- FF = 4965.8 FINISH FLOOR ELEVATION
- ~~~~~ PROPOSED WATER BAR
- ~~~~~ FIRST FLUSH PONDING LIMITS
- ~~~~~ LIMITS OF EROSION CONTROL

VICINITY MAP



KEYED NOTES

- CONSTRUCT PROPOSED PAVING / WALKS / CROSSWALKS / CURB AND GUTTER TO ELEVATIONS SHOWN.
- EXISTING PAVING TO REMAIN.
- CONSTRUCT HC PARKING AREA TO ADA STANDARDS. MAX. 2% SLOPE IN ANY DIRECTION.
- CONSTRUCT ADA COMPLIANT HANDICAP ACCESS RAMP AT ELEVATIONS SHOWN (1" PER FOOT - LENGTH VARIES). MAX. 2% CROSS-SLOPE. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
- TOP OF ASPHALT TO BE FLUSH WITH TOP OF CONCRETE WALK THIS AREA. SEE ARCHITECTURAL FOR CONCRETE PARKING BUMPER LOCATIONS (TYP).
- PROVIDE 3.0' WIDE CURB OPENING AT FLOWLINE SHOWN. SEE DETAIL SHEET CG-501.
- INSTALL ROCK EROSION PROTECTION AT CURB OPENING AND WITHIN FLOWLINES CARRYING CONCENTRATED FLOW (VARY FROM 2'-3' WIDE). LIMITS HATCHED PER LEGEND. SEE DETAIL SHEET CG-501.
- DOT HATCHED AREA REPRESENTS EXTENTS OF 'FIRST FLUSH' RETENTION PONDING. CONSTRUCT TO ELEVATIONS SHOWN.
- NOT USED.
- CONSTRUCT NEW CONCRETE DUMPSTER PAD AND ENCLOSURE AT ELEVATIONS SHOWN.
- EXTENDED BUILDING STEMWALL REQUIRED THIS AREA. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
- ROOF DRAIN TO DISCHARGE TO LANDSCAPE AREA. PROVIDE EROSION CONTROL AT OUTLET (CONCRETE SPLASHPAD O.E.). INSTALL DRAINAGE SWALE WITH ANGULAR ROCK EROSION CONTROL TO EXTENTS SHOWN. SEE PLUMBING PLAN FOR SPECIFIC ROOF DRAIN LOCATIONS.
- CONSTRUCT 8"x8" CHAMFERED RIBBON CURB ALONG EAST DRAINAGE EASEMENT. CURB TO BE PROTRUDING 1" ABOVE ADJACENT ASPHALT (BOTH SIDES). SEE SECTION A ON SHEET CG-501.

PROJECT DATA

PROPERTY: THE SITE IS AN UNDEVELOPED COMMERCIAL PROPERTY WITHIN C.O.A. VICINITY MAP C-16. THE SITE IS BOUNDARY TO THE WEST AND NORTH BY DEVELOPED COMMERCIAL, TO THE EAST BY ALAMEDA PARK DR. NE AND TO THE SOUTH BY PASEO ALAMEDA NE.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE AN APPROXIMATELY 14,000 SF BUILDING (FOOTPRINT) WITH DOCK, PAVED PARKING, PEDESTRIAN WALKS, DRAINAGE IMPROVEMENTS, AND LANDSCAPING.

LEGAL DESCRIPTION: LOT 2 AND 3 ALAMEDA BUSINESS PARK CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

SITE AREA: 1.7676 AC.

BENCHMARK: ALBUQUERQUE CONTROL SURVEY BENCHMARK "NM 47-2", ELEVATION = 4997.592 (NAVD 1988)

OFF-SITE: LOT 1, ALAMEDA BUSINESS PARK DISCHARGES 6.72 CFS (FULLY DEVELOPED DISCHARGE) TO THE EXISTING DRAINAGE CHANNEL RUNNING NORTH TO SOUTH ALONG THE WEST PROPERTY BOUNDARY.

STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" (0.44" LESS 0.1" FOR INITIAL ABSTRACTION) OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM.

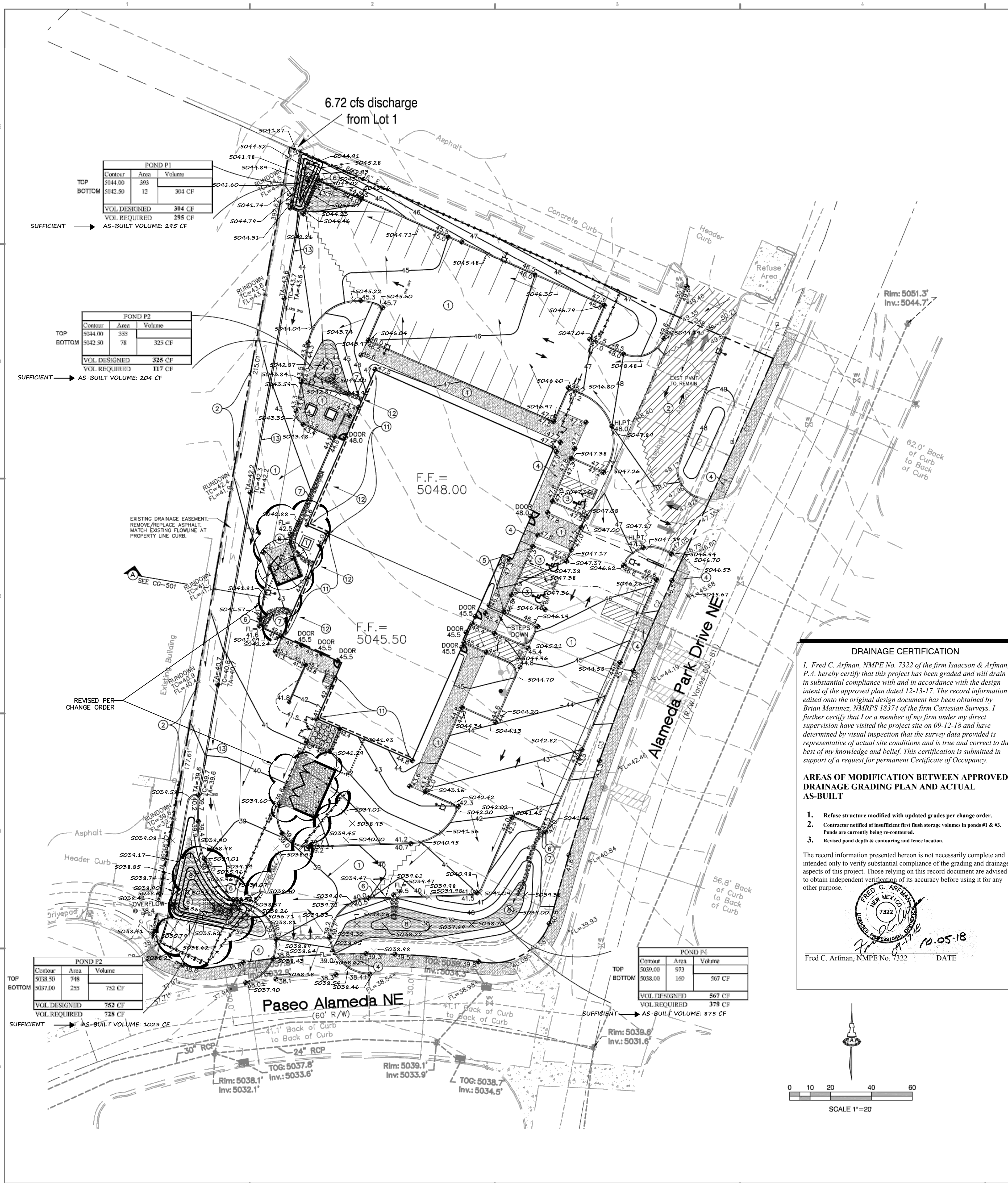
FIRST FLUSH RETENTION PONDS WILL BE CONSTRUCTED WITHIN THE LANDSCAPE AREAS AS DESIGNATED BY DOT HATCH. STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE PONDS. STORMWATER WILL THEN FREE DISCHARGE TO MAHON BLVD. TO FOLLOW THE HISTORIC FLOWPATHS.

FLOOD ZONE: THE SUBJECT PROPERTY APPEARS TO LIE WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN) IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP NO. 3500136 G, EFFECTIVE DATE 9-26-2008.

ENGINEER: FRED C. ARFMAN, PE

ISAACSON & ARFMAN, P.A.
128 MONROE ST NE, APO, NM 87108
PHONE: (505) 268-8828

SURVEYOR: WILL W. PLOTNER, JR., NMPS NO. 14271
CARTESIAN SURVEYS INC.
P.O. BOX 44414 RIO RANCHO, NM 87174 PHONE:
(505) 896-3050



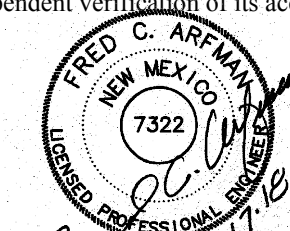
DRAINAGE CERTIFICATION

I, Fred C. Arfman, NMPE No. 7322 of the firm Isaacson & Arfman, P.A. hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 12-13-17. The record information edited onto the original design document has been obtained by Brian Martinez, NMPS 18374 of the firm Cartesian Surveys. I further certify that I or a member of my firm under my direct supervision have visited the project site on 09-12-18 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 a request for permanent Certificate of Occupancy.

AREAS OF MODIFICATION BETWEEN APPROVED DRAINAGE GRADING PLAN AND ACTUAL AS-BUILT

- Refuse structure modified with updated grades per change order.
- Contractor notified of insufficient first flush storage volumes in ponds #1 & #3. Ponds are currently being re-contoured.
- Revised pond depth & contouring and fence location.

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 document are advised to obtain independent verification of its accuracy before using it for any other purpose.



Fred C. Arfman, NMPE No. 7322 DATE: 10.05.18