

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

December 10, 2021

David Aube
The Design Group
120 Vasser St. SE
Albuquerque, NM 87106

RE: **LaVida Llena**
10501 Lagrima De Oro
Permanent Certificate of Occupancy - Accepted
Grading and Drainage Plan Stamp Date: 7/31/19
Certification Dated: 11/22/21
Drainage File: F21D028

Dear Mr. Aube:

PO Box 1293

Based on the submittal received on 11/23/21 and site visit on 12/10/21, this certification is approved in support of Permanent Certificate of Occupancy by Hydrology for the out lined portion of the site.

Albuquerque

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

NM 87103

Sincerely,

www.cabq.gov

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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: La Vida Llena **Building Permit #:** _____ **Hydrology File #:** F21-D28
DRB#: #2019-002114 (1003807) **EPC#:** SI-2019-00117 **Work Order#:** _____
Legal Description: Amended Plat Land in Section 33, T11N, R4E, NMPM, La Vida Llena,
City Address: 10701 Lagrima de Oro Road NE

Applicant: Haverland Carver Lifestyle Group **Contact:** Joe Gomez
Address: 101501 Montgomery Boulevard NE, 87111
Phone#: 505-991-5557 **Fax#:** _____ **E-mail:** jgomez@lavidallena.com

Other Contact: The Design Group **Contact:** David Aube
Address: 120 Vassar Drive SE, Albuquerque, NM 87106
Phone#: 505-998-6430 **Fax#:** 505-242-6881 **E-mail:** daube@designgrouponm.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:

- X 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:

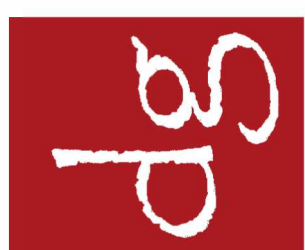
- ____ BUILDING PERMIT APPROVAL
X CERTIFICATE OF OCCUPANCY **Permanent**
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 11-22-2021 **By:** David Aube

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



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CONSULTANT

V. EXISTING DRAINAGE CONDITIONS

CURRENTLY THE SITE CONTAINS MANY WELL LANDSCAPED DETENTION/RETENTION AREAS. RUNOFF FROM A MAJORITY OF THE ROOFS IS DIRECTED INTO SHALLOW DEPRESSIONS IN THE LANDSCAPING AREAS WITH CATCH BASINS AND DISCHARGE PIPES THAT RESTRICT THE RUNOFF RATES FROM THE DETENTION AREAS TOWARD THE FINAL OUTLET LOCATION ALONG LAGRIMA DE ORO ROAD NE AT THE SOUTHWEST CORNER OF THE SITE.

BASIN EX1 CONTAINS A LARGE PORTION OF THE WEST AND NORTH SIDES OF THE CAMPUS. TO REDUCE SURFACE FLOWS AN UNDERGROUND STORM WATER CONVEYANCE SYSTEM WAS CONSTRUCTED ALONG THE WESTERN SIDE OF THE SITE. ALL RUNOFF FROM THIS BASIN EVENTUALLY IS DETAINED IN POND #8 LOCATED AT THE SOUTHWEST CORNER OF THE SITE. A 18" PIPE THEN DISCHARGES EXCESS RUNOFF INTO THE LAGRIMA DE ORO ROAD. THIS DISCHARGE RATE IS 14.92 CFS. TO REDUCE THE EXCESS RUNOFF FROM THE CAMPUS AND TO MAINTAIN THE PONDING VOLUME, THE OUTLET PIPE WAS ALSO ANALYZED AND CAN CONVEY 18.5 CFS UNDER INLET CONTROL CONDITIONS. THE 14.92 CFS PEAK ALLOWABLE DISCHARGE RATE WILL BE USED AS THE EXISTING ALLOWABLE DISCHARGE FROM THE SITE. A TABLE HAS BEEN PROVIDED ON SHEET CD1 OF ALL PONDS AND ROUTED PEAK OUTLET FLOWS.

BASIN EX2 AND EX3 ARE FIRST ROUTED THROUGH PONDING AREAS WITHIN THE LANDSCAPING AREAS. WITH OVERFLOW ENTERING THE ROADWAY IN BASIN EX1. BASIN EX4 IS THE SERVICE YARD WITH EXCESS RUNOFF ENTERING THE ROADWAY IN BASIN EX1. THROUGH PONDING AREAS WITHIN THE LANDSCAPED COURTYARD AREAS, BASIN EX5 AND EX6 ARE FIRST ROUTED TO THE DETENTION BASIN NEAR THE ENTRANCE DRIVE FROM LAGRIMA DE ORO. THIS POND THEN DISCHARGES INTO THE LARGER DETENTION BASIN IN BASIN EX1. A 18" STORM DRAIN PIPE CONNECTS THE TWO DETENTION PONDS.

BASIN EX8 GENERATES A PEAK RUNOFF RATE OF 26.37 CFS. OTHER BASINS THAT ARE ROUTED INTO BASIN EX8 ADD 19.53 CFS TO GENERATE AN INCOMING PEAK FLOWRATE INTO POND EX8 OF 45.90 CFS. THE OUTLET PIPE FROM POND 8 INTO LAGRIMA DE ORO HAS CAPACITY TO CONVEY 18.5 CFS, BUT THE ROUTING HYDROGRAPH ONLY REQUIRES A DISCHARGE RATE OF 14.92 CFS TO CONTAIN THE 100 YEAR 6 HOUR DESIGN STORM. SHOULD THE STORM WATER EXCEED THE AVAILABLE PONDING VOLUME, THE WATER WILL OVER TOP OF THE BENT BETWEEN THE STORM WATER EXCESS POND AND THE DETENTION BASIN. THIS EXCESS FLOW WILL BE DISCHARGED THROUGH A SERIES OF TURNED BLOCKS IN THE MASONRY WALL ALONG LAGRIMA DE ORO ROAD NE.

EXISTING OUTLET PIPE AND STORM DRAINAGE STRUCTURE WITHIN LAGRIMA DE ORO R.O.W HAVE BEEN INSPECTED AND APPEAR TO BE FUNCTIONING AS DESIGNED. FURTHER INSPECTIONS WILL BE COMPLETED DURING CONSTRUCTION.

VI. PROPOSED DRAINAGE CONDITIONS

PROPOSED MODIFICATIONS WILL BE COMPLETED IN THREE PHASES. THE FIRST PHASE IS TWO SMALL SURFACE PARKING AREAS (COMBINED ONLY 12 SPACES) AND AN ELEVATED PARKING DECK OVER AN EXISTING DETENTION POND. PHASE 2 WILL BE THE CONSTRUCTION OF A NEW INDEPENDENT LIVING BUILDING IN THE NORTH EAST PART OF THE SITE. PHASE 3 WILL BE A THE CONSTRUCTION OF A NEW MEMORY CARE AND ASSISTED LIVING BUILDING ALONG THE SOUTHERN PART OF THE SITE ADJACENT TO LAGRIMA DE ORO.

THE PHASE 1 CONSTRUCTION WILL HAVE A MINIMAL IMPACT ON STORM RUNOFF RATES. THE ISSUE FOR PHASE 1 IS THE CONSTRUCTION OF A NEW INDEPENDENT LIVING BUILDING. THIS BUILDING WILL REQUIRE THE FIRST FLUSH VOLUME AND ANY INCREASE IN PEAK RUNOFF RATES FOR FUTURE PHASES. THE PLAN BEING PROPOSED HERE IS FOR THE FULLY DEVELOPED CONDITIONS. RESHAPING OF POND PRO 8 WILL CREATE AN AVAILABLE VOLUME OF 4040 CF FOR RETENTION OF FIRST FLUSH VOLUMES. PHASE 1 FIRST FLUSH VOLUME IS ONLY 1,034' X 2745'F= 79 CF.

PHASE 2 INCLUDES CONSTRUCTION OF A NEW INDEPENDENT LIVING BUILDING AND ADDITIONS TO THE COMMONS AREAS OF THE CAMPUS. STORM RUNOFF PATTERNS ARE MAINTAINED AND INCREASE FROM BASIN PRO #1 WILL BE CONTAINED WITHIN THE EXISTING RING ROAD AND DIRECTED OVER TO POND PRO 8 AT THE SE CORNER OF THE SITE. THE PEAK RUNOFF RATE FROM BASIN PRO#1 IS INCREASED BY 0.43 CFS DUE TO A SLIGHT CHANGE IN LANDSCAPING AND IMPERVIOUS SURFACES.

BASIN PRO 3 HAS A CHANGE IN IMPERVIOUS SURFACE DUE TO BUILDING ADDITIONS FOR THE COMMONS SPACES OF THE CAMPUS. POND EX2 HAS CAPACITY OF 8,438 CUBIC FEET WITH A PROPOSED EXCESS RUNOFF VOLUME REQUIREMENT OF 6,578 CUBIC FEET. THIS POND AND THE DISCHARGE PIPING WILL REMAIN WITHOUT ANY PROPOSED MODIFICATIONS.

ADDITIONAL RETENTION FOR FIRST FLUSH VOLUMES IS 1771CF (BASIN PRO#1)+ 382 CF (BASIN PRO#3)= 2153 CF. THIS WILL BE CONTAINED WITHIN POND PRO 8.

PHASE 3 WILL LIKELY OVERLAP THE PHASE 2 CONSTRUCTION ACTIVITIES. PHASE 3 INCLUDES CREATION OF ADDITIONAL PARKING ALONG THE WESTERN SIDE OF THE SITE TO PROVIDE OVERFLOW PARKING AND A NEW MEMORY CARE AND ASSISTED LIVING WING ALONG THE SOUTH EAST PORTION OF THE SITE. THIS WILL AFFECT ONLY BASIN PRO#7. THE PEAK RUNOFF RATE WILL BE INCREASED BY 0.46 CFS IN BASIN PRO #7. FIRST FLUSH VOLUMES FOR THIS PHASE WILL BE 1351 CF AND WILL BE CONTAINED IN POND PRO 8. THE TOTAL FIRST FLUSH VOLUME FOR THE ENTIRE DEVELOPMENT IS 3,593 CF. THE PHASE 1 RESHAPING OF POND PRO 8 WILL PROVIDE 4,040 CF OF RETENTION AND WILL COVER THE REQUIRED FIRST FLUSH VOLUME.

BASINS EX2, EX5, EX6 AND EX8 WILL NOT BE AFFECTED BY THE PROPOSED DEVELOPMENT. FOR SIMPLICITY, THE EXISTING DRAINAGE PATTERNS WILL BE MAINTAINED. THE ONLY CHANGE TO THE DRAINAGE BASIN IS NOW TO THE CHANGE IN AREAS OF THE DRAINAGE BASIN. THE AREA THAT WAS REQUESTED FROM THIS BASIN IS NOW ACCOUNTED FOR WITHIN BASIN PRO 1. EXCESS RUNOFF FROM BASIN PRO 7 WILL BE ROUTED THROUGH POND 7 (WHICH WILL REMAIN UNCHANGED) AND INTO POND PRO#8.

TO ACCOUNT FOR THE FIRST FLUSH VOLUME, POND #8 WILL NEED TO BE ENLARGED (SIMPLY BY RESHAPING THE BOTTOM TO PROVIDE ADDITIONAL CAPACITY) BY 4040 CUBIC FEET. THE DIFFERENCE BETWEEN EXISTING AND PROPOSED EXCESS RUNOFF FROM BASIN 1 AND 7 CREATES A NEED TO POND AN ADDITIONAL 0.0596 ACRE-FEET (2.605 CF) WITHIN POND #8. COMBINED THIS REQUIRES THAT POND #8 HAVE AN ADDITIONAL VOLUME OF 3,446 CUBIC FEET. POND PRO 8 WILL BE RESHAPED IN PHASE 1 OF THE PROJECT AND WILL PROVIDE THE REQUIRED ADDITIONAL VOLUME OF 4,040 CUBIC FEET. THE INCREASE OF 18,803 CUBIC FEET WILL EASILY CONTAIN THE REQUIRED EXCESS RUNOFF VOLUME AS WELL AS THE FIRST FLUSH.

VII. CONCLUSIONS

THE EXISTING CONTAINS MANY ON-SITE PONDING FACILITIES THAT WILL CONTINUE TO DETAIN AND DELAY THE PEAK RUNOFF FROM THE SITE. THE PROPOSED DEVELOPMENT WILL BE REPLACING PARKING LOTS FOR BUILDINGS AND WILL HAVE A MINIMAL INCREASE IN PEAK RUNOFF ENTERING THE PONDING AREAS. THE LOWEST POND WILL BE ENLARGED BY 18,803 CF TO PROVIDE THE REQUIRED VOLUME TO RETAIN THE FIRST FLUSH VOLUME AS WELL AS THE INCREASE IN EXCESS RUNOFF. DISCHARGE POINTS FROM THE SITE WILL MATCH THE HISTORIC AS THE DISCHARGE IS EXCESS RUNOFF. DISCHARGE POINTS FROM THE SITE WILL INTO THE PUBLIC ROW. THIS OUTLET CONDITION WILL NOT BE MODIFIED BY THE PROPOSED DEVELOPMENT. CAPACITIES OF DOWNSSTREAM SYSTEMS WOULD NOT BE AFFECTED BY THE PROPOSED DEVELOPMENT.

