## CITY OF ALBUQUERQUE Planning Department Suzanne Lubar, Director



Mayor Richard J. Berry

December 31, 2015

Fred C. Arfman, P.E. Isaacson & Arfman, PA 128 Monroe St NE Albuquerque, NM 87108

Re:

The Legends at High Desert-Lot 28

6323 Cliffbrush Lane

Request Permanent C.O. - Accepted

Permanent CO - Accepted

Engineer's Stamp dated: 12-9-14 (E23D003B)

Certification dated: 12-31-15

PO Box 1293

Dear Mr. Arfman,

Albuquerque

Based upon the information provided in your submittal received 12/16/2015, the above referenced Certification received is acceptable for the release of permanent Certificate of Occupancy by Hydrology.

New Mexico 87103 If you have any questions, you can contact me at 924-3686 or Totten Elliott at 924-3982.

www.cabq.gov

Abiel Carrillo, P.E.

Sincerely

Principal Engineer,

Planning Department

TE/AC

C: email, Cordova, Camille C.; Connor, Francis; Miranda, Rachel; Sandoval, Darlene M.



Thomas O. Isaacson, PE(RET.) & LS(RET.) . Fred C. Arfman, PE . Asa Nilsson-Weber, PE

December 31, 2015

Reference: Lot 28

The Legends at High Desert

COA Hydrology File No.: E23/D3B

#### **DRAINAGE CERTIFICATION**

I, Fred C. Arfman, NMPE 7322 of the firm Isaacson & Arfman, PA, hereby certify that Lot 28 as identified in the as-built drawing has been graded or the basements constructed per the grades and will drain in substantial compliance with and in accordance with the design intent of the original approved plan dated 09-30-2005 and the Supplemental Study dated 12-09-14. The record information edited onto the original design document has been obtained by Will Plotner Jr., NMPS 14271, of the firm Cartesian Surveys Inc. I further certify that I have personally visited the project site on the date next to each rolling certification hereon 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 for release of building permit. 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 Ariman, NMPE No. 7322

SE TO STONAL ENDER

Date

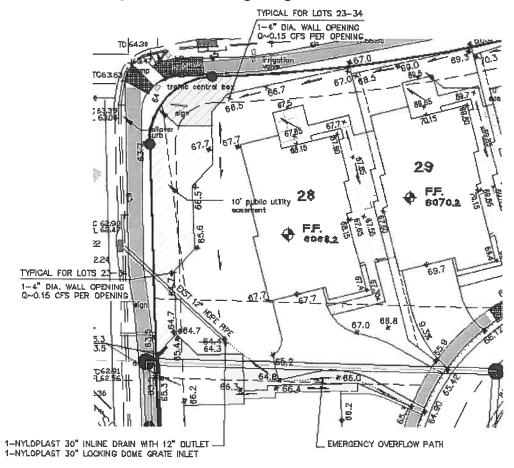
# THE LEGENDS & HIGH DESERT-DRAINAGE REPORT DATED 12/9/14

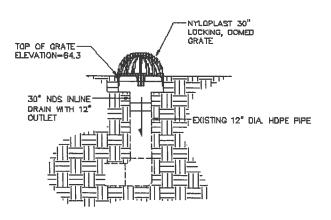
There is also a storage volume of approximately 8,000 cubic feet in the street should the water rise to the emergency overflow elevation of 65.3.

The 30" domed grate, emergency overflow path and 4" dia. wall opening on Lot 28 adjacent to the domed grate inlet (#3) shall be constructed prior to grading certification for lots 23-28.

The 4" dia backyard wall openings on lots 23-34 shall also be constructed on each lot prior to grading certification for each lot.

See below for an enlarged view of Lot 28 grading and inlet detail.





IN-LINE DRAIN WITH DOMED GRATE

## III. PROPOSED CONDITIONS

The inlets were analyzed for two scenarios with the grates being clogged to various degrees. The table below summarizes the inlet and wall opening capacities based on the overflow elevation of 65.3 for the emergency overflow condition (see Appendix A for calculations).

### **INLET CAPACITIES**

**SCENARIO 1 - Normal Condition** 

INLET 1 - 50% CLOGGED INLET 2 - 0% CLOGGED	17.8 5.5	cfs cfs	(sump @ 0.5' h (on grade)	nead)
	23.3	cfs	Actual=22.8	cfs
SCENARIO 2 -Emergency Overflow Condition				
INLET 1 - 100% CLOGGED	0	cfs		
INLET 2 - 50% CLOGGED	16.4	cfs	(sump)	
INLET 3 50% CLOGGED	6.9	cfs	(sump)	
4" DIA. WALL OPENING -				
50% CLOGGED	0.4	cfs	_	
	23.7	cfs	Actual=23.4	cfs

Scenario 1 shows the "normal condition" at a water depth of 0.5' at the sump inlet.

Scenario 2 shows that if the street sump inlet (#1) is completely clogged, the flows will be captured by the upstream street inlet (#2), inlet (#3) and the wall opening on Lot 28—all emergency overflow inlets and wall opening assumed 50% clogged.

