

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> February 16, 2023
<b>TO:</b> Land Development Services Department of Building & Safety		<b>FROM:</b> Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
<b>SUBJECT:</b>	Drainage Study for:	<b>COPIES TO:</b>
Verdin Summerlin V22 (Parcel I)		RCI Engineering
<b>Cross Streets:</b>	SEC Desert Foothills Dr. & Kestrel Creek Ave.	Woodside Homes Nevada LLC
<b>File Number:</b>	F:\Depot\DSMemos\DS5646A.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	137-23-114-001	
<b>Zoning Action:</b>	22-0502-TMP1	
<b>FEMA Flood Zone</b>	YES NO <b>X</b>	
<b>Proposed Storm Drain</b>	YES <b>X</b> NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	1/26/2023	2/16/2023	See Comments Below	\$400.00	5113848: \$400
<b>TOTAL FEES (LDDRS):</b>				<b>\$400.00</b>	----

**REMARKS:**

The Drainage Study for the subject project has been reviewed and:

	is approved subject to conformance to all City standards and the following conditions:
<b>X</b>	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

- Interim/Ultimate Condition Exhibit:** *Hydraulic Section KB9* is shown to have a slope of 9.67%, but the referenced drainage study shows that the section has a slope of 10.20%, address the discrepancy.
- Interim/Ultimate Condition Exhibit:** *Hydraulic Section FW1* is shown to have a slope of 10.20%, but the referenced drainage study shows that the section has a slope of 9.67%, address the discrepancy.
- Interim Condition Exhibit:** In the Hydraulic Section summary table, several sections show a Q<sub>100</sub> of 0 cfs including Sections 1, 3, 4A, 5A, 7I, 10B, and 12B which is inconsistent with the calculations provided. For example, Section 7I shows 0 cfs, but the calculations provided are for 11 cfs.
- Interim Condition Exhibit:** In the Hydraulic Section summary table, Section 7I shows a normal depth of 0.28 but the calculations provided show a depth of 0.16.
- Interim Condition Exhibit:** In the Hydraulic Section summary table, Section 11A shows a Q<sub>100</sub> of 10 cfs but the calculations provided show a flow of 13 cfs.
- Interim Condition Exhibit:** For DI#02, the Inlet Summary table shows a slope of 2.04%, but the calculations provided are for 2.00%

7. The inlet calculations shall utilize 50% clogging factor to size the inlets. Review and revise all pertinent calculations and callouts in the construction notes accordingly.
8. **Unit 1:** Sheet G-2: DI #04 is at a local low point. Address whether there is any emergency overflow path in case the inlet is totally clogged. Note that the maximum ponding depth allowed is 1'.
9. **Unit 1:** Sheet G-2: The 18"-RCP between DI #05 and SDMH #4 is under the sidewalk and is not allowed. Any maintenance of the pipe in the future will need to tear up the sidewalk as well which will be costly to the future HOA. Relocate the pipe to be within the roadway.
10. **Unit 1:** Sheet G-6: DI #03 is at a local low point. Address whether there is any emergency overflow path in case the inlet is totally clogged. Note that the maximum ponding depth allowed is 1'.
11. **Unit 1:** Sheet D-2 and Sheet D-3: Sections 36/D-2 and 39/D-2, Section 46/D-3 show the "PAD" is exposed to the drainage from the few steps facing the lot. Address how this can be mitigated in the next submittal.
12. **Unit 1:** In general, provide riprap pad at the interface between Phase 1 interim roadway and the unimproved Phase 2 dirt road. Review and revise accordingly.
13. **Unit 2:** Sheet D-1: Section 5/D-1 shows the "Finished Floor" is exposed to the drainage from the few steps facing the house. Address how this can be mitigated in the next submittal.
14. The following garage finish floors do not meet the Regional Flood Control District minimum criteria of twice the  $Q_{100}$  depth of flow up to 18-inches above the water surface (CCRFCD Manual Section 304.4.E.1). The following garage finish floors should be revised or alternate flood protection provided.

LOT	GFF shown	Min GFF
12	3302.80	3303.04
13	3304.30	3304.42
17	3313.50	3313.82
18	3317.10	3317.14
74	3302.90	3302.92
75	3302.40	3302.59
77	3301.70	3301.89
79	3301.20	3301.21
51	3342.60	3342.94

**NOTE:** Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the Nevada Division of Environmental Protection a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

**END OF REMARKS**  
HDR/AYS

T/R/S: T20S/R59E/23  
AREA K-23