

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE:</b> November 15, 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>
Summerlin Village 29 - Parcels C and D		RCI Engineering
<b>Cross Streets:</b>	NWC of Sky Vista Drive & Far Hills Avenue	Toll Brothers Inc.
<b>File Number:</b>	F:\Depot\DSMemos\DS5715A.doc	Bart Anderson, P.E., DevCo
<b>Parcel Number:</b>	137-27-117-002 & 137-27-117-003	CCRFCFCD
<b>Zoning Action:</b>	23-0424-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	10/26/2023	11/15/2023	See Comments Below	\$400.00	5497880: \$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.

1. Provide a copy of the zoning/planning conditions associated with this site (**23-0424-TMP1**) with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.
2. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCFCD) master planned facility. Therefore, CCRFCFCD concurrence is required prior to final approval of the drainage study.

Please note that effective March 15, 2019, the CCRFCFCD adopted new requirements for drainage study concurrence submittal. Follow the link below for specific guidance.

<http://gustfront.ccrfcd.org/LandDev/LandDev.aspx>

3. The proposed project is premised on the flood protection provided by the perimeter streets and the associated storm facilities (*Far Hills Avenue, Grand Park Boulevard, Sandstone Rice Drive and Sky Vista Drive*). The subject drainage study will not be approved prior to the posting of construction bonds of the stated perimeter street improvements and the storm facilities.

4. Sites with a grade difference of 2 feet above or below existing grades are required to have approval from the City of Las Vegas Planning and Development Department. The engineer must submit copies of the grading plans and detail sheet with a letter justifying the grade difference to the City Planning Department (229-6301). The engineer must provide City Planning approval with the next submittal.
5. **Figure 6 Ultimate Conditions Map, 100-Year Onsite Hydraulic Sections – Swale Sections Table:** *Section F* does not match the depth shown in the Flowmaster data.
6. **Figure 6 Ultimate Conditions Map:** The subbasin boundaries shown for subbasins PR11 and PR7 are inconsistent with the improvement plans. The improvement plans show that the north portion of the common elements flow north not south as indicated in **Figure 6**.
7. **Figure 7 Interim Conditions Map:** Show a clear distinction between the units on the interim condition map so the conditions set by the grading can be verified.
8. Provide a separate storm facilities exhibit for the proposed onsite facilities with labels for storm drains and all inlets.
9. Provide an exhibit identifying all proposed public drainage easements (privately maintained by the HOA) in the next submittal.
10. Show house layouts and driveway locations on the grading plans.
11. Provide labels for the existing contours on the grading plans.

#### **Unit 1 Improvement Plans:**

12. **Sheet G-1 & Pertinent Sheets:** Lot 88, for example, shows two levels, UPPER and LOWER differing by about 12' spanning over a scarp. It is not clear how the house building will lay over the two-level plot of land. Provide a typical section or profile across the lot with the building shown. Also provide a typical lot drainage for this type of products in the next submittal.
13. Address how a homeowner get access from one level to the other without climbing over the steep scarp within his/her own backyard. Is the drainage proposed to be sheet flow over the steep scarp which will cause erosion in every storm event?
14. **Sheet G-3:** The hump at the entrance in *Granite Run Way* off of *Grand Park Boulevard* does not meet the requirement of 6" above the flow depth in *Grand Park Boulevard*. Revise the hump to provide adequate freeboard from offsite flow.
15. Provide flow line elevations at the cross gutter of *Granite Run Way* at *Grand Park Boulevard* in the next submittal.
16. **Sheet G-5:** At the southern end of *Grange Creek Street*, extend the L-curb from DI #1 for the whole end section and then wrap to Lot 21 for a minimum of 20' distance to contain the incoming flow more securely.
17. **Sheet G-5 & Pertinent Sheets:** All the lots along *Sky Vista Drive* show the LOWER level drains to a wall with nowhere to escape. Address and explain how these lots drain in the next submittal.
18. **Sheet G-7:** Provide a width to the public drainage easement.
19. **Sheet D-1, Section 13:** Show the dimensions of the ditch next to the wall and provide a hydraulic section to model the flow in the area.

20. **Sheet D-1, Section 13:** Drainage easement is to be labeled Public Drainage Easement to be Privately Maintained.
21. **All Plan & Profile sheets:** Revise the callout of storm drain pipes from “public” to “**PRIVATE**”.

Unit 2 Improvement Plans:

22. **Sheet G-1:** At the northeastern wall of Lot 102, Sections 23 and 24 show landscaping going towards the street away from the lot but the plan view with the contours shows that the landscaping flows towards Lot 102. Review and revise accordingly.
23. **Sheet G-1:** Lot 101 and Lot 102: The fonts overlapping, therefore FF cannot be checked.
24. **Sheet G-5:** Provide a profile across **CE-G** to verify whether there is a hump within the common lot to facilitate adequate head for the onsite flow to be captured by DI #11 and DI #12.
25. **Sheet D-1:** *Section 10* shows a swale with FL in the 10'-wide common element needs to be shown on plans. Show flow line elevations in regular intervals on **Sheet G-2** and **Sheet G-4** accordingly.
26. **Sheet D-2:** There are two detail sections named 27.
27. All storm drain inlets that are more than 10'-deep require a special structural detail and calculations. Submit structural design and calculations to *City Building & Safety Department* for review and approval prior to the final approval of the drainage study.
28. Private streets must be public drainage easements. Provide a note on the grading plans “Note: All private streets are P.U.E., Public Sewer Easements and Public Drainage Easements to be privately maintained by HOA”.
29. The engineer must provide a table on the grading plans that shows a quantity estimate of all drainage improvements within Public Drainage Easements. All drainage improvements within Public Drainage Easements must be bonded and inspected.
30. All drainage easements must be public drainage easements to be privately maintained and common lots to be labeled on the grading plans and to be dedicated as such in the final map.
31. Clearly specify all proposed wrought iron fence/gate to be constructed per Uniform Standard Drawing 425.S1.

**\*\*\* The City of Las Vegas Flood Control is standardizing the file naming of drainage studies and plans during the digitizing process. When saving the project files in the CD or thumb drive, please follow the system below:**

**If drainage study only contains one combined file, use the following naming convention in Document Title:**

**1<sup>st</sup> Submittal DS and Plans (for first and original submittal);**

**2<sup>nd</sup> Submittal DS and Plans (for second submittal (addendum #1)) etc.**

**If drainage study contains multiple files, use the following naming convention in Document Title:**

**1<sup>st</sup> Submittal DS (for the report of the drainage study)**

**1<sup>st</sup> Submittal Plan 1 (could be the drainage condition maps)**

**1<sup>st</sup> Submittal Plan 2 (could be the improvement plans) etc.**

**NOTE:** Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section*. Additionally, final approval of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

**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/27  
AREA K-27