

<b>CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM</b>		<b>DATE: 09/26/2024</b>	
<b>TO:</b> Land Development Services Department of Community Development – Building & Safety Division		<b>FROM:</b> Albert Sung, P.E. Flood Control Project Engineer Department of Public Works	
<b>SUBJECT:</b> Drainage Study for: <b>RACEL &amp; MAVERICK</b>		<b>COPIES TO:</b> Kimley-Horn and Associates	
<b>Cross Streets:</b>	Racel Street & Maverick Street	Richmond American Homes	
<b>File Number:</b>	F:\Depot\DSMemos\DS5801A.doc	Bart Anderson, P.E., DevCo	
<b>Parcel Number:</b>	125-11-703-005, 006, 007, 008, 009, 010, 011, 012		
<b>Zoning Action:</b>	24-0306-TMP1		
<b>FEMA Flood Zone</b>	YES NO <b>X</b>		
<b>Proposed Storm Drain</b>	YES NO <b>X</b>		

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 <sup>st</sup> Submittal	09/09/2024	09/26/2024	See Comments Below	\$400	5923291: \$400
<b>TOTAL FEES (LDDRS):</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 24-0306-TMP1 on 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 Clark County jurisdiction to the south on Racel Street. The engineer must coordinate with Clark County Public Works Department (CCPW) and incorporate any concerns for boundary conditions. CCPW concurrence is required prior to final acceptance of the study.
3. A review of the grading plan shows an elevation difference of approximately 3.0-feet of cut/fill adjacent to developed properties. Sites with a grade difference of 2 feet above or below existing are required to have approval from the *City 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 Planning approval with the next submittal.
4. Along the west property line, flows through the existing lots heading in the southeast direction will be blocked from the new wall. The existing property owners has complained to the city regarding excessive flows through their lots. Provide drainage easement and address on the next submittal on how this will be mitigated.

5. Many streets within this development are designed to a slope of 0.40% and less. 0.40% street slope is the minimum allowed without a nuisance storm drain system and is difficult to construct. The engineer and developer is advised that ponding in proposed improvements is not allowed. Sections of substandard improvements may have to be removed and replaced during the inspection process. On Racel Street and Meisenheimer Ave, the street slopes are less than 0.40%, provide drop inlets and storm drain or revise grading so the slope is at least 0.40% minimum.
6. The Q100 flow entering drainage easement between lots 13 and 14 must be contained within the curb opening and sidewalk underdrain. Address on the next submittal.
7. The high point at the two entrances off of Meisenheimer Ave does not meet the requirement of 6" above the flow depth in Meisenheimer Ave. Revise grading to provide adequate protection from offsite flow.
8. Figure EX and PRO: Verify is there a flow split at Torrey Pines Dr and Meisenheimer Ave? It looks like some of the flow going down Torrey Pines Dr will head east down Meisenheimer Ave. Review and revise all subsequent calculations accordingly.
9. Figure EX: Correct the EON1 area on the Existing Flow Summary Table on the Existing Conditions Basin Map. Should say 9.83 acres.
10. Figure PRO: For the physical copy, please provide the correct exhibit for the Proposed Conditions Basin Map, the exhibit for the Lone Mountain Temple was included.
11. Figure PRO: On the Proposed Conditions Basin Map, update the map to the correct acreages on the basin ID callouts.
12. Figure PRO: Street Hydraulic Section RAC2 (min), the slope of 0.05% is too low. Review and revise calculations accordingly.
13. The Developed Condition Weighted Curve Numbers and Precipitation Values Table shows EOFF1 and EOFF2 as 20,000 sq ft lots, but they are 40,000 sq ft lots. This issue is isolated to this table and is not in the HEC model but should be revised for consistency.
14. The Developed Condition Weighted Curve Numbers and Precipitation Values shows under EOFF3 the incorrect CN for the 20,000 lot value, so the weighted curve number should be 88.8, not 88.2 as shown. This issue is isolated to this table and is not in the HEC model but should be revised for consistency.
15. The DON2 value from the Developed Condition HEC states the time of concentration is 0.143 but is calculated to be 0.161 on the Standard Form 4.
16. Sheet 2 General Notes Sheet: Update the Stormwater Management Notes to the current version.
17. Per the Valley Gutter detail, the valley gutter cannot contain the flow through the drainage easement and will inundate the surrounding walls. Use concrete flume to contain the Q100 flow.
18. Overall Grading Sheet 4: Label Meisenheimer Ave street name.
19. Overall Grading Sheet 4: Show existing storm drain and drop inlets at Racel St and Maverick St.
20. Label existing storm drain and drop inlets per CLV drawing number 107Y4821.
21. Profile Sheets PP1, PP2, PP6 and PP7: Verify if there is a new proposed grade at centerline for Racel Street and Meisenheimer Ave. It should be existing.
22. Profile Sheets PP6 and PP7: Station and elevations labels are missing from the profile view bottom grid/row.

23. Add finish floor elevations to the existing properties on the west side.
24. Lighten or remove the existing onsite property lines.
25. 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."
26. 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. The minimum width for a public drainage easement is 10'.

**\*\*\* 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:** 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.

**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.

**END OF REMARKS**  
HDR/AYS/SF

T/R/S: T19S/R60E/S11  
AREA G11