

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: June 14, 2023
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for:	COPIES TO:
Summerlin Village 27 Parcel E - Custom Lots Mass Grading		GCW, Inc.
Cross Streets:	NWQ of Park Drift Trail & Sunset Run Drive	The Howard Hughes Company
File Number:	F:\Depot\DSMemos\DS5677A.doc	Bart Anderson, P.E.; DevCo
Parcel Number:	137-21-501-003; 137-15-401-003	CCRFCD
Zoning Action:	23-0176-TMP1; 23-0176-MOD1	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES X NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	5/16/2023	6/14/2023	See Comments Below	\$400.00	5276022: \$400
TOTAL FEES (LDDRS):				\$400.00	----

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:
X	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 (**23-0176-TMP1; 23-0176-MOD1**) 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 project proposes to mass grade **Parcel E** with numbers of temporary swales and berms at various locations of the parcel. Prior to final plan approval the developer must complete a maintenance and liability agreement for the interim drainage improvements (berms or channels) and post a minimum maintenance bond of \$50,000 or 50-percent of the construction cost for the improvements, whichever is greater. Once the drainage study is conditionally approved, the engineer must submit an estimate of the quantities for constructing the facility and an exhibit that adequately shows the location and limits of the drainage facility to *City's Land Development Section* (229-6371) to begin the agreement and bond process.

In order for the maintenance bond to be released in the future, a drainage update / letter will be required to justify that the offsite berms / channels are no longer necessary and can be removed.

3. The site is adjacent to or crosses an existing or proposed Clark County Regional Flood Control District (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.

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

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

4. **Figure 6 – Existing Condition Drainage Map:** provide combination point to indicate where the existing condition drainage will be conveyed.
5. **Figure 7 - Interim Condition Drainage Map:** Address how the flow increase (or decrease) from existing conditions will impact the interim condition.
6. **Figure 7 - Interim Condition Drainage Map:** Per the reference study “*Summerlin Village 27 Parcel M & E Drainage Improvement*” along the north side of *Parcel M* and *Parcel E*, the design 100-year flow in the channel is 1,249cfs. However, per the “*Interim Condition 100-Year Hydraulic Summary Table*”, *Hydraulic Sections 1, 2 and 3* only show 239cfs for the 100-year flow. Review and revise all the hydraulic sections in the next submittal.
7. **Figure 8 – Ultimate Condition Drainage Map:** Provide hydraulic sections and label the 100-year flow in the *Boundary Channel* along the north side of *Parcel E*.
8. A sediment basin was proposed at the downstream outlet of the subject site. It appears that this sediment basin is temporary only to contain the interim sediment deposit during major storm event. Upon ultimate development of the project site, is it correct that this sediment basin will not be necessary and will be removed? Address and clarify in the next submittal.
9. Provide rip-rap calculations for the proposed sedimentation basin.
10. **Sheet GD1 to Sheet GD3:** *Detail Section 2/MG* is used to show the vertical relation between the custom lot and the adjacent future *Boundary Channel*. However, there are some locations within particular lots that do not seem to have a substantial scarp down to the channel, ie, it is not clear how high is the custom lot relative to the channel. Provide additional detail section at those locations to verify safe vertical distance, ie, the pad must be at least 18” above the adjacent 100-year water surface in the *Boundary Channel*.
11. **Sheet GD3:** The grading plan indicates offsite grading showing portion of the sediment basin encroaching into the adjacent property. Secure a notarized letter of permission from the property owner allowing the grading. This letter is required prior to final acceptance of the drainage study.
12. **Sheet MG:** On *Typical Grading Section 4*, the word BERM is misspelled as BURM. Revise accordingly.
13. **Sheet DT5:** Riprap is proposed on a 2:1 embankment slope which seems unstable. Provide supporting geotechnical report to allow 2:1 slope. Otherwise, revise to a more standard 3:1 side slope.
14. Add the note below as Standard Note #6 to the “*Las Vegas Valley Construction Stormwater Runoff Management – Standard Notes*” column in the *General Note Sheet G2*:

Post-Construction BMPs (PCBMPs) / Control Measures noted on the Grading Plans are mandatory permanent regulatory stormwater pollution controls. These PCBMPs must be installed per the approved plans and must be permanently maintained.

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

T/R/S: T20S/R59E/21
AREA K-21