



10/17/24

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Summerlin Village 27 Parcel D Custom Lots Mass Grading Date: October 2024

Location of Development: a) Descriptive (Cross Streets) North/South: Park Drift Trail
 East/West: Sunset Run Drive

b) Section: 15 Township: 20S Range: 59E

c) APN : 137-15-310-001

Name of Owner: The Howard Hughes Company, LLC

Telephone No.: (702) 791-4300 Fax No.: N/A E-Mail Address: April.Chapman@howardhughes.com

Address: 1700 S Pavilion Center Drive, Suite 250; Las Vegas, Nevada 89135

Contact Person-Name: Lee Gong, PhD, PE, CFM Telephone No.: (702) 804-2000

* E-Mail Address: LGong@gcwengineering.com Fax No.: (702) 804-2299

Firm: GCW, Inc.

Address: 1555 South Rainbow Boulevard, Las Vegas, Nevada 89146

Type of Land Development/Land Disturbance Process:

<input type="checkbox"/>	Rezoning	<input type="checkbox"/>	Subdivision Map	<input type="checkbox"/>	Clearing and Grading Only
<input type="checkbox"/>	Parcel Map	<input type="checkbox"/>	Planned Unit Development	<input checked="" type="checkbox"/>	Other (Please specify below)
<input type="checkbox"/>	Large Parcel Map	<input type="checkbox"/>	Building Permit	<input type="checkbox"/>	Mass Grading

1. Total Owned Land Area: At Site: 52.29 acres Being Developed/Disturbed: +/- 33 acres

2. Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? Yes** No

3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? Yes** No

4. Proposed type of development (Residential, Commercial, Etc.): Mass Grading

5. Approximate upstream land area which drains to the subject site: 0 acres

6. Has the site drainage been evaluated in the past? YES NO If yes, please identify documentation: Summerlin West Village 27 & 31 Master Conceptual Drainage Study for Tributary Area to Reverance (V26 Detention Basin). Atkins 2021

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Southeast towards Existing Channel.

8. Briefly describe your proposed schedule for the subject project: ASAP



10/17/24
Engineer's Seal

Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

***New Required Field**

****Review and concurrence of the Clark County Regional Flood Control District is required.**

Revision	Date

Local Entity File No. _____

REFERENCE:

STANDARD FORM 1

62027-202A

October 15, 2024

Albert Y. Sung, P.E.
City of Las Vegas, Public Works
495 S. Main Street
Las Vegas, NV 89101

**Re: Technical Drainage Study for Summerlin Village 27 Parcel D Custom Lots Mass Grading
Addendum #2**

Dear Mr. Sung,

This letter is to certify that all documents provided on electronic submittal (CD) match the hardcopy version of the study.

Respectfully submitted,

Lee Gong, PhD, P.E., CFM
Project Engineer



10/17/24





62027-202A

October 17, 2024

Re: Response to City of Las Vegas Comments #2 on the Technical Drainage Study for Summerlin Village 27 Parcel D- Custom Lots Mass Grading

This report addresses the City of Las Vegas (CLV) review comments dated August 19, 2024, regarding the project in its entirety. Below are individual responses to each comment included in the review letter.

Comment 1:

The project proposes to mass grade Parcel D 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.

Response:

Noted.

Comment 2:

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>

Response:

Noted. The project will be submitted to CCRFCD for Concurrence following conditional approval from CLV.

Comment 3:

Sheet MG (Master Mass Grading Plan) and Sheet GD3: The features in Sheet MG and Sheet GD3 do not match the Interim Condition Drainage Map (Figure 7). Sheet MG and Sheet GD3 should not include features of the V27 Debris Basin and the outlet facilities. Review and

revise in the next submittal.

Response:

Noted. The V27 Debris Basin linework along with the outlet facilities have been removed from the plan. Note the plans call out the location of the V27 Debris Basin as a future facility.

Comment 4:

Sheet MG, Sheet GD1 and Sheet GD3: It is not clear how Section Detail 5/MG and Section Detail 1/GD1 relate to each other, ie, explain where the "lot berm" (in 1/GD1) is located in 5/MG? Revise all section details accordingly.

Response:

Section Detail 5/MG has been revised to show the proposed lot berm.

Comment 5:

Pertaining to the comment above, it appears that the riprap is being installed on the wrong side of the berm.

Response:

Per the updated Section Detail 5/MG, riprap has been specified along the face of the berm on the side of the existing wash. Please note that the berm is drawn on the property line and the riprap hatch is shown inside the property line, as this is where the berm begins, which may cause the confusion about which side of the berm is the riprap on. Again, as shown on Detail 5/MG, the riprap will be on the external side of the berm and will extend into the site to the desired length of the berm embankment indicated on the grading sheets and lot berm detail.

Please contact me via email at LGong@gcwwengineering.com if you have any questions or require additional information.

Respectfully,

GCW, INC.

Lee Gong, PhD, P.E, CFM
Flood Control Division

Silverio Milian-Castro, EI
Flood Control Division

APPENDIX



CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: October 14, 2024
TO: Land Development Services Department of Community Development – Building & Safety Division		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT: Drainage Study for: Summerlin Village 27 Parcel D - Custom Lots Mass Grading		COPIES TO: GCW Engineers Surveyors
Cross Streets:	Park Drift Trail & Sunset Run Drive	Howard Hughes Company, LLC
File Number:	F:\Depot\DSMemos\DS5792B.doc	Bart Anderson, P.E., DevCo
Parcel Number:	137-15-310-001	CCRFCD
Zoning Action:		
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES NO X	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	7/30/2024	8/19/2024	Not Approved	\$400.00	5863409: \$400
2 nd Submittal	8/29/2024 & 10/7/2024	10/14/2024	See Comments Below	\$400.00	5905104: \$400
			TOTAL FEES (LDDRS):	\$800.00	----

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.

- The project proposes to mass grade **Parcel D** 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.

- 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>

3. **Sheet MG (Master Mass Grading Plan) and Sheet GD3:** The features in *Sheet MG* and *Sheet GD3* do not match the *Interim Condition Drainage Map (Figure 7)*. *Sheet MG* and *Sheet GD3* should not include features of the *V27 Debris Basin* and the outlet facilities. Review and revise in the next submittal.
4. **Sheet MG, Sheet GD1 and Sheet GD3:** It is not clear how *Section Detail 5/MG* and *Section Detail 1/GD1* relate to each other, ie, explain where the "lot berm" (in 1/GD1) is located in 5/MG? Revise all section details accordingly.
5. Pertaining to the comment above, it appears that the riprap is being installed on the wrong side of the berm.

***** 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:

1st Submittal DS and Plans (for first and original submittal);

2nd Submittal DS and Plans (for second submittal (addendum #1)) etc.

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

1st Submittal DS (for the report of the drainage study)

1st Submittal Plan 1 (could be the drainage condition maps)

1st 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
AYS

T/R/S: T20S/R59E/15
AREA K-15