

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM		DATE: April 10, 2024
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 29 Phase 3 Infrastructure (Grand Park Boulevard)		GCW Engineering, Inc.
Cross Streets:	Grand Park Boulevard & Spring Run Drive	Howard Hughes Company, LLC
File Number:	F:\Depot\DSMemos\DS5758A.doc	Bart Anderson, P.E. Devco
Parcel Number:	137-28-201-001	CCRFC
Zoning Action:		
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	3/21/2024	4/10/2024	See Comments Below	\$400.00	5676624: \$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. The project proposes to build temporary berm/swale along both sides of the roadway of *Grand Park Boulevard*. Prior to final plan approval the developer must complete a maintenance and liability agreement for the interim drainage improvements (off-site 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. 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 of Las Vegas Flood Control* for approval. Once the drainage study is conditionally approved, the engineer should contact the City's Land Development Section (229-6371) to begin the agreement 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.

2. The proposed project is premised on the flood protection provided by the improved *Park Drift Trail* (west of *Grand Park Boulevard*, *Project Summerlin West Village 29 & 32 Park Drift Trail & Loop Road Rough Grading*), *Spring Run Drive* (*Project Summerlin West Village 29 Phase 2 Infrastructure*) with the associated storm drain facilities and the *Summerlin West Village 29 COS-3/COS-4 Wash Improvements Project*. The subject drainage study will not be approved prior to the posting of construction bonds of the stated street improvements and the pertinent flood control facilities.

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. On **Sheet G3**, add the note below as Standard Note #6 to the “*Las Vegas Valley Construction Stormwater Runoff Management*” block:
Standard Note No. 6: 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.
5. **Figure 8: Hydraulic Section 1:** The summary of flows (8.5cfs) differs from the flow utilized (7.5cfs).
6. **Figure 8: Hydraulic Section CH1:** It appears that the swale where CH1 locates has the flow combination of *Basins OFF3* and *OFF4*, ie, the Q_{100} in CH1 shall be $14\text{cfs} + 7\text{cfs} = 21\text{cfs}$. Revise the *100-Year Hydraulic Section Summary* table and all subsequent calculations. The riprap size may need to be upgraded in the next submittal.
7. **Figure 8:** The proposed 54”-RCP between SDMH #2 and the V29 Wash appears to be a temporary facility. It will be re-routed by the future storm drain in *Grand Park Boulevard*. If this is true, clearly denote that the 54”-RCP is an interim facility to be abandoned or removed in the ultimate condition on all pertinent maps and plans.
8. **Figure 8:** There is a note for *DI #2.2* about 300’ south of *DI #1.2* on the east side of Grand Park Boulevard. However, this inlet is not found in any of the improvement plans. Address and clarify in the next submittal.
9. The maximum spacing between drop inlets in a public street is 600’. Extend a proposed 24”-RCP in *Grand Park Boulevard* from SDMH #1 to Station 72+00 (approx.) with two inlets accordingly.
10. **Sheet PP6:** Shows that the inflow invert is at 3646.3’ on improvement plans but the WSPG shows that it is at 3646.2’. Revise to match each other.
11. **Sheet LP4:** Label all the inverts of the storm drain on the profile.
12. **Sheet LP4:** Apply sacrificial concrete for the entirety of the pipe.
13. Show D-load computations for pipes included in Sheet LP4. At its deepest, the downstream pipe is 18-ft deep, noting a significant depth of pipe for a Class III pipe.
14. **Sheet DT1: Section G:** Show the proposed riprap and establish whether “2.5’ MIN. SWALE” refers to depth or width.
15. **Sheet DT1: Section H:** Show both the minimum and maximum side slopes proposed.
16. *DI #1.1* and *DI #1.2* are more than 10’ in depth. 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.
17. Storm drain construction note 1/SD: Revise all the pertinent sheets to call out the standard of manhole construction to USD Drawing No. 405.2.

***** 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/HDR

T/R/S: T20S/R59E/28
AREA K-28